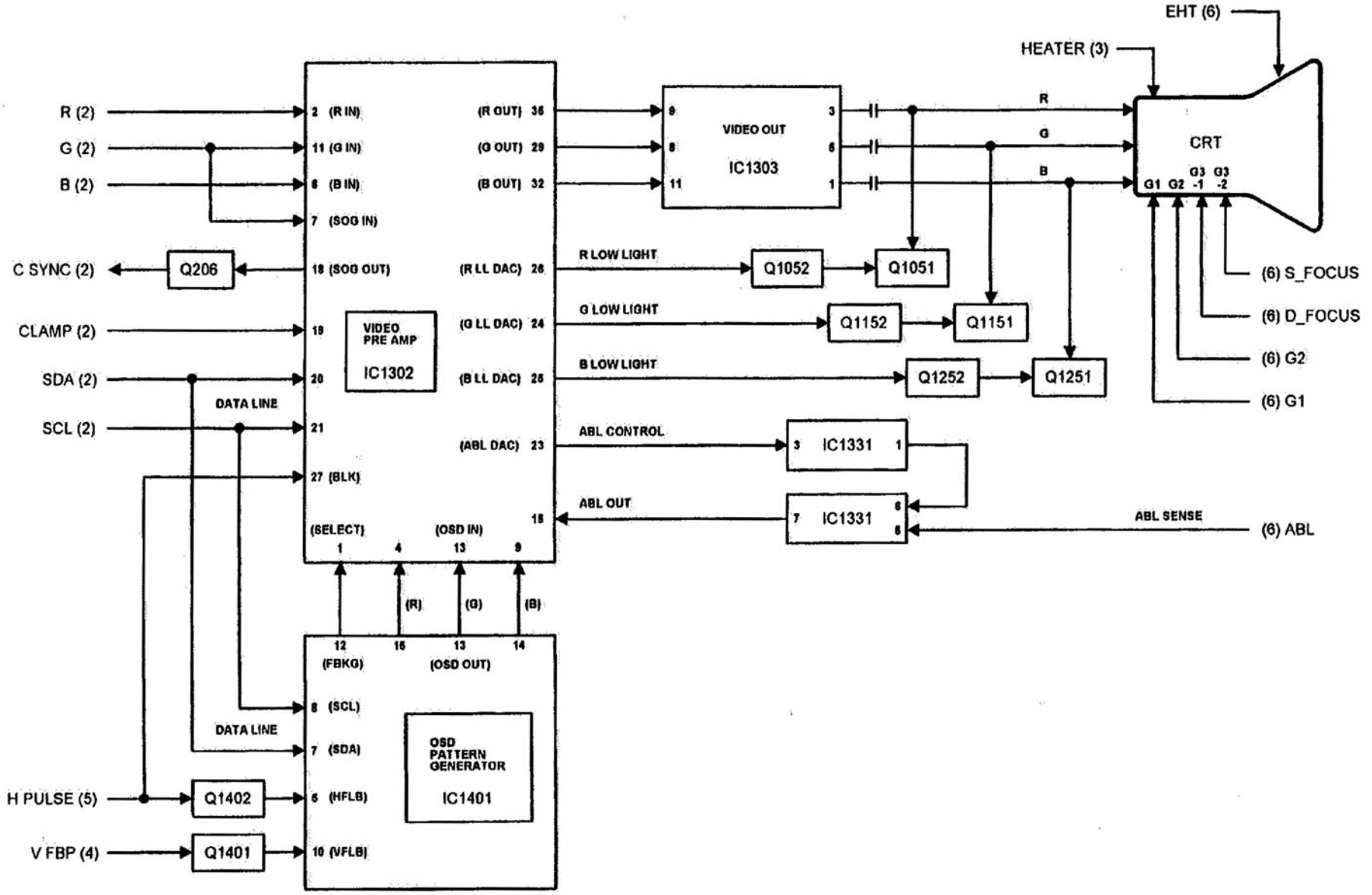
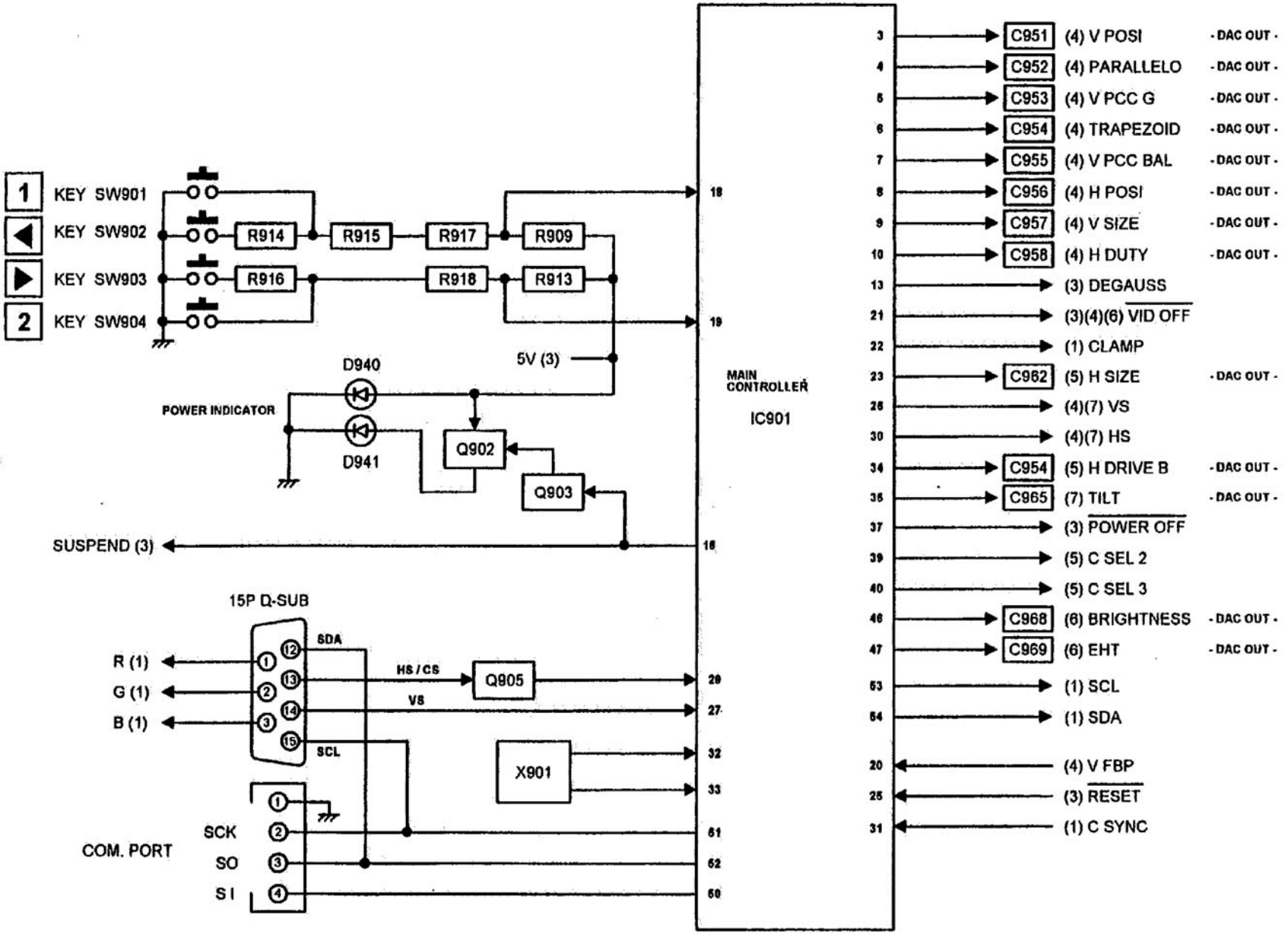
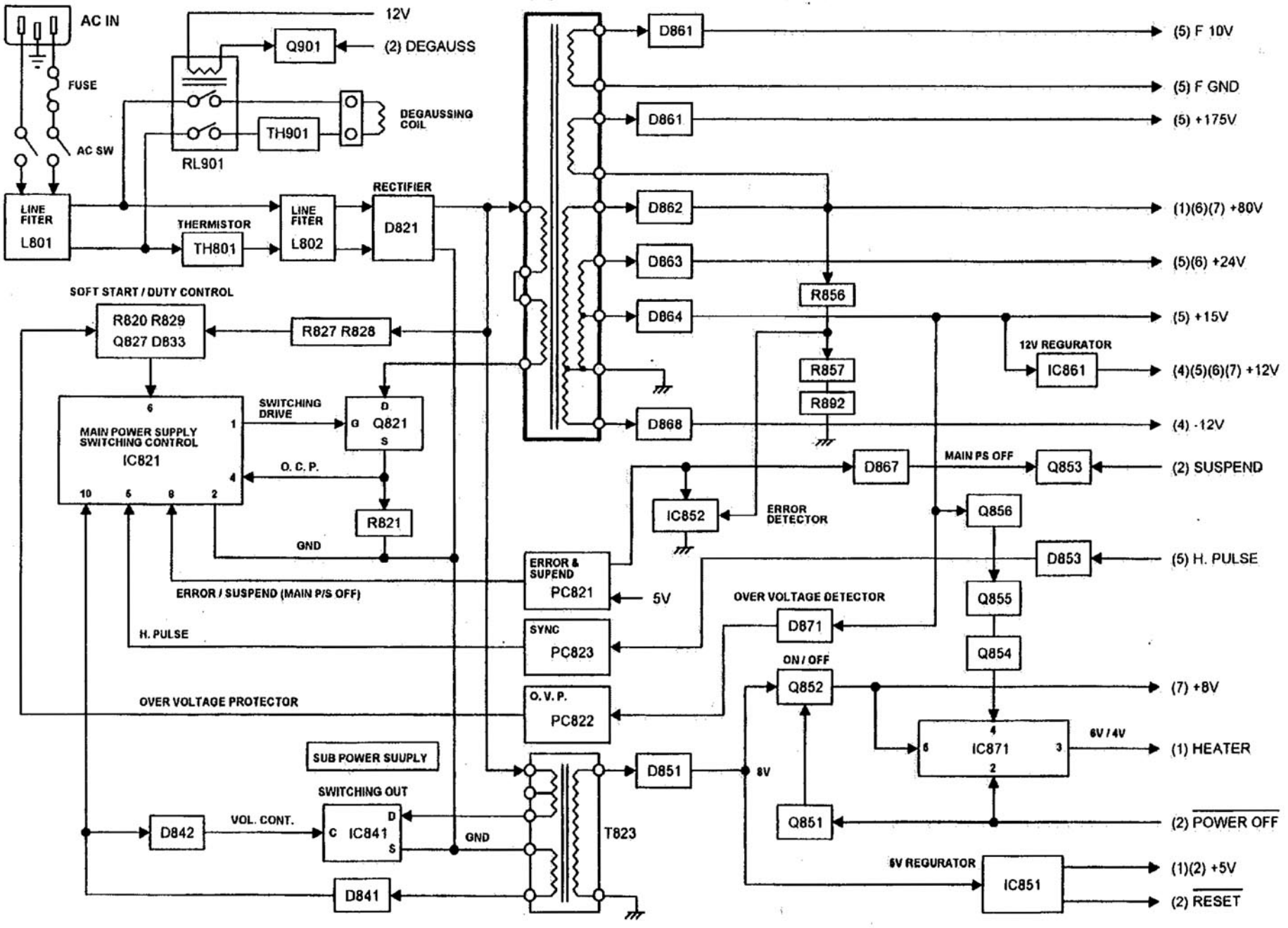
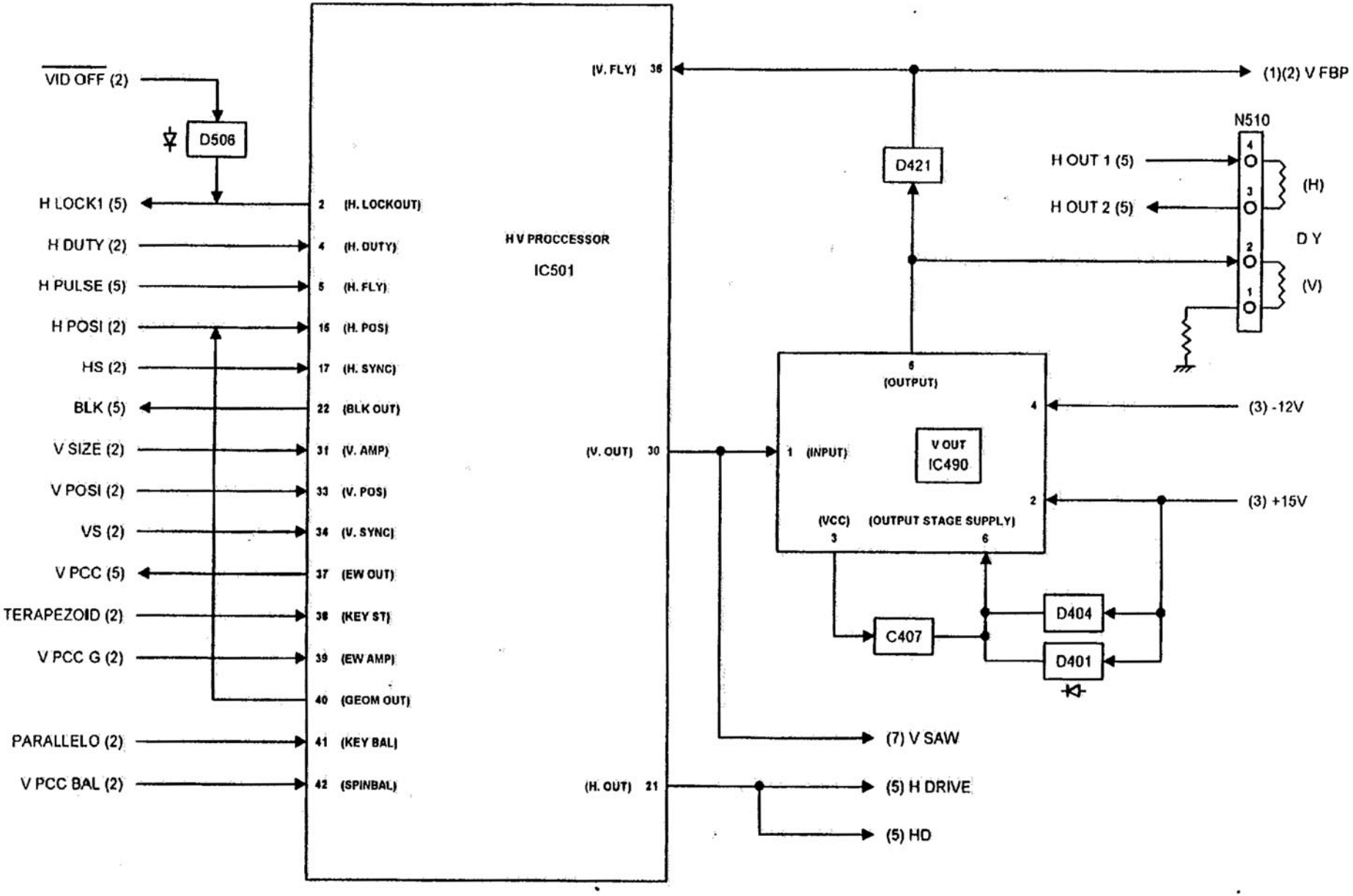
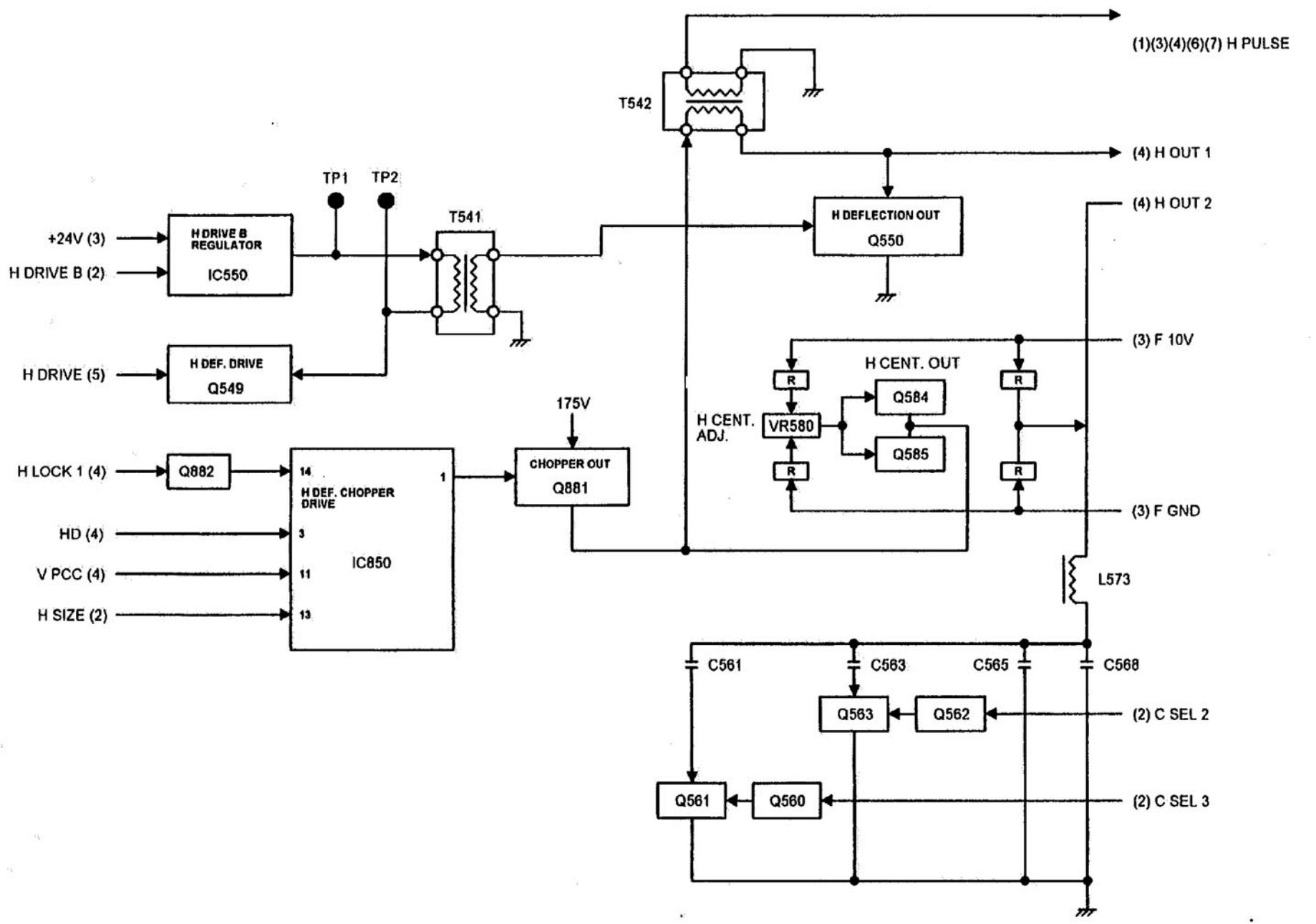

EHT (6)
HEATER (3)
R (2)
G (2)
B (2)
2 (R IN)
11 (G IN)
6 (B IN)
7 (SOG IN)
C SYNC (2)
Q206
18 (SOG OUT)
CLAMP (2)
19
SDA (2)
20
DATA LINE
SCL (2)
21
27 (BLK)
VIDEO PRE AMP
IC1302
(R OUT) 36
(G OUT) 29
(B OUT) 32
(R LL DAC) 26
(G LL DAC) 24
(B LL DAC) 25
(ABL DAC) 23
18
(SELECT) 1
(OSD IN) 4 13 9
(R)
(G)
(B)
12 (FBKG)
15 13 14 (OSD OUT)
8 (SCL)
7 (SDA)
DATA LINE
OSD PATTERN GENERATOR
IC1401
H PULSE (5)
Q1402
6 (HFLB)
V FBP (4)
Q1401
10 (VFLB)
9
8
11
VIDEO OUT
IC1303
3
6
1
R LOW LIGHT
Q1052
Q1051
G LOW LIGHT
Q1152
Q1151
B LOW LIGHT
Q1252
Q1251
ABL CONTROL
3 IC1331 1
ABL OUT
7 IC1331 6
5
ABL SENSE
(6) ABL
R
G
B
CRT
G1 G2 G3 -1 G3 -2
(6) S_FOCUS
(6) D_FOCUS
(6) G2
(6) G1


1
KEY SW901
KEY SW902
KEY SW903
2
KEY SW904
R914
R915
R917
R909
R916
R918
R913
5V (3)
D940
POWER INDICATOR
D941
Q902
Q903
SUSPEND (3)
15P D-SUB
R (1)
G (1)
B (1)
SDA
HS / CS
VS
SCL
Q905
X901
COM. PORT
SCK
SO
SI
MAIN CONTROLLER
IC901
18
19
16
28
27
32
33
61
62
60
3 C951 (4) V POSI - DAC OUT -
4 C952 (4) PARALLELO - DAC OUT -
5 C953 (4) V PCC G - DAC OUT -
6 C954 (4) TRAPEZOID - DAC OUT -
7 C955 (4) V PCC BAL - DAC OUT -
8 C956 (4) H POSI - DAC OUT -
9 C957 (4) V SIZE - DAC OUT -
10 C958 (4) H DUTY - DAC OUT -
13 (3) DEGAUSS
21 (3)(4)(6) VID OFF
22 (1) CLAMP
23 C962 (5) H SIZE - DAC OUT -
26 (4)(7) VS
30 (4)(7) HS
34 C954 (5) H DRIVE B - DAC OUT -
35 C965 (7) TILT - DAC OUT -
37 (3) POWER OFF
39 (5) C SEL 2
40 (5) C SEL 3
46 C968 (6) BRIGHTNESS - DAC OUT -
47 C969 (6) EHT - DAC OUT -
53 (1) SCL
54 (1) SDA
20 (4) V FBP
25 (3) RESET
31 (1) C SYNC

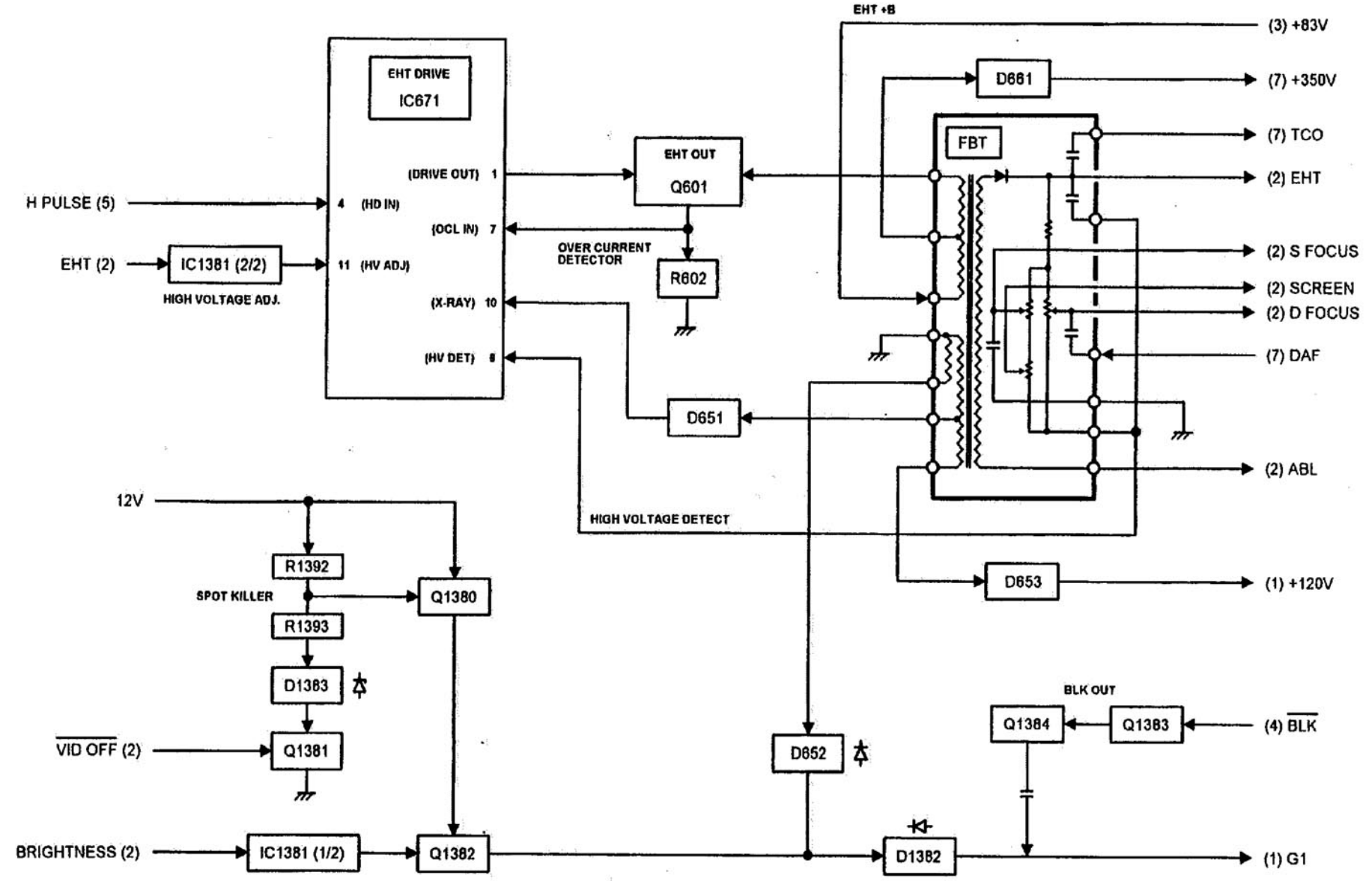
SHEET (3) / POWER SUPPLY for GS771




VID OFF (2)
D506
H LOCK1 (5)
H DUTY (2)
H PULSE (5)
H POSI (2)
HS (2)
BLK (5)
V SIZE (2)
V POSI (2)
VS (2)
V PCC (5)
TERAPEZOID (2)
V PCC G (2)
PARALLELO (2)
V PCC BAL (2)
2 (H. LOCKOUT)
4 (H. DUTY)
5 (H. FLY)
16 (H. POS)
17 (H. SYNC)
22 (BLK OUT)
31 (V. AMP)
33 (V. POS)
34 (V. SYNC)
37 (EW OUT)
38 (KEY ST)
39 (EW AMP)
40 (GEOM OUT)
41 (KEY BAL)
42 (SPINBAL)
H V PROCCESSOR
IC501
(V. FLY) 36
(V. OUT) 30
(H. OUT) 21
(1)(2) V FBP
D421
N510
H OUT 1 (5)
H OUT 2 (5)
(H)
D Y
(V)
6
(OUTPUT)
4
(3) -12V
1 (INPUT)
V OUT
IC490
2
(3) +15V
(VCC)
3
(OUTPUT STAGE SUPPLY)
6
C407
D404
D401
(7) V SAW
(5) H DRIVE
(5) HD


(1)(3)(4)(6)(7) H PULSE
T542
(4) H OUT 1
(4) H OUT 2
TP1
TP2
T541
+24V (3)
H DRIVE B (2)
H DRIVE B REGULATOR
IC550
H DEFLECTION OUT
Q550
H DRIVE (5)
H DEF. DRIVE
Q549
(3) F 10V
H CENT. OUT
R
Q584
H CENT. ADJ.
VR580
Q585
R
R
R
175V
H LOCK 1 (4)
Q882
14
H DEF. CHOPPER DRIVE
1
CHOPPER OUT
Q881
(3) F GND
HD (4)
3
IC850
V PCC (4)
11
H SIZE (2)
13
L573
C561
C563
C565
C568
Q563
Q562
(2) C SEL 2
Q561
Q560
(2) C SEL 3

SHEET (6) / EHT OUT for GS771



SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE

The component identified by shading or international symbol ⚠ on the following schematic diagrams incorporate special features important for protection from X-Radiation, fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for those critical components.

NOTES :

1. **RESISTOR**

   All resistors are carbon 1/4W resistor, unless otherwise noted by the following marks.
   Unit of resistance is ohm (Ω), (K = 1,000, M = 1,000,000)

   - ◯ : Non Flammable
   - ⊠ : Metal Oxide
   - ▢ : Wire Wound
   - ⊗ : Fusible
   - ◰ : Flame Proof Rectangular
   - △ : Solid
   - ◎ : Metal (Precision and high stability)
   - : Thermistor
   - : Positive coefficient Thermistor

2. **CAPACITOR**

   All capacitors are ceramic 50V capacitor, unless otherwise noted by the following marks.
   Unit of capacitance is μF, unless otherwise noted.

   - : Electrolytic
   - Ⓣ : Tantalum
   - NP : Bipolar
   - Ⓢ : Polystyrene
   - ⊗ : Temperature Compensation
   - Ⓜ : Polyester
   - ⓜ : Metalized Polyester
   - ⊠ : Polypropylene
   - △ : Mica
   - ◯ : Ceramic
   - ◎ : Ceramic (SL)

3. **COIL**

   Unit of inductance is μH, unless otherwise noted.

4. **VOLTAGE MEASUREMENT**

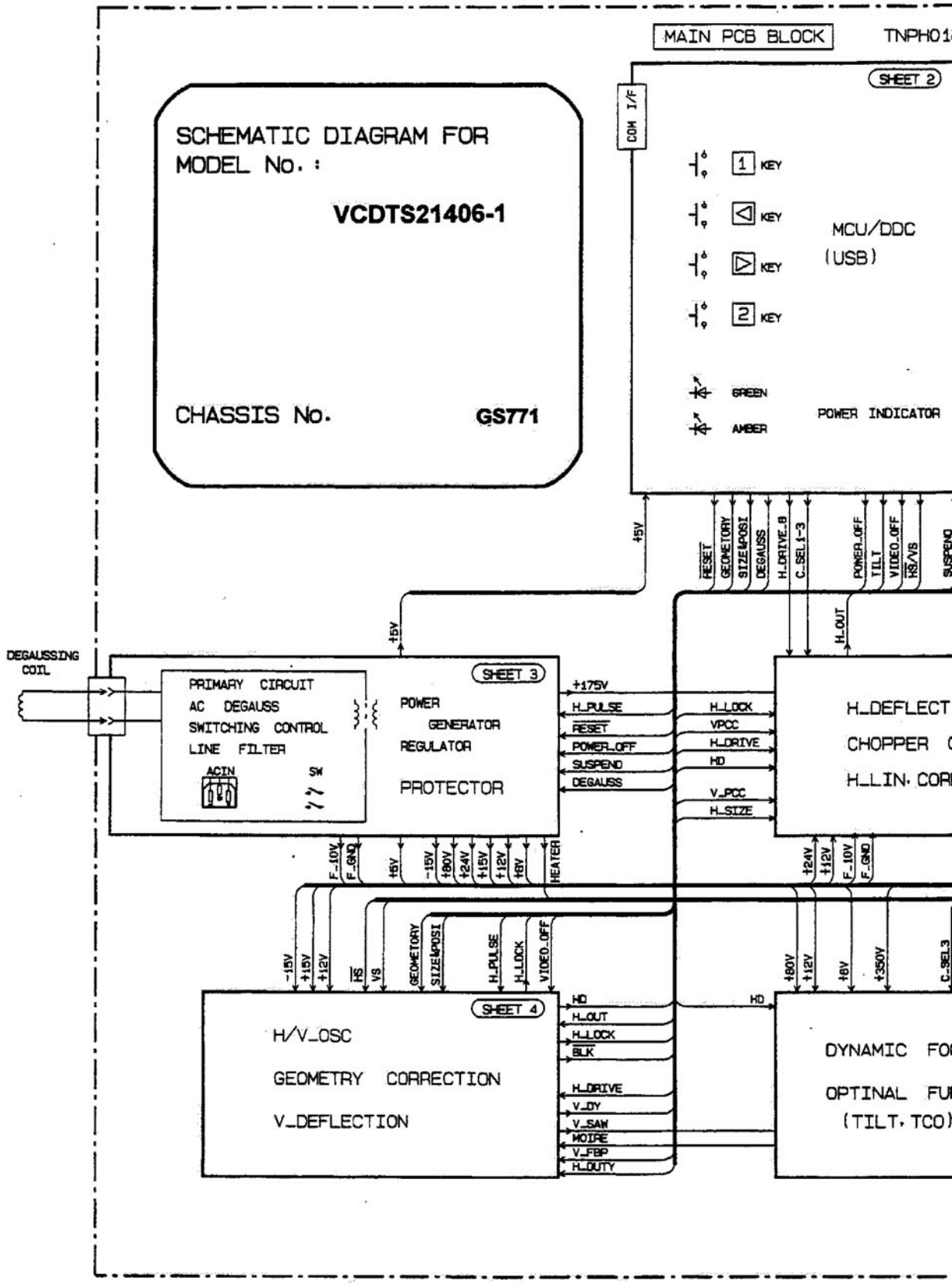
   Voltage is measured by a digital meter receiving normal signal.

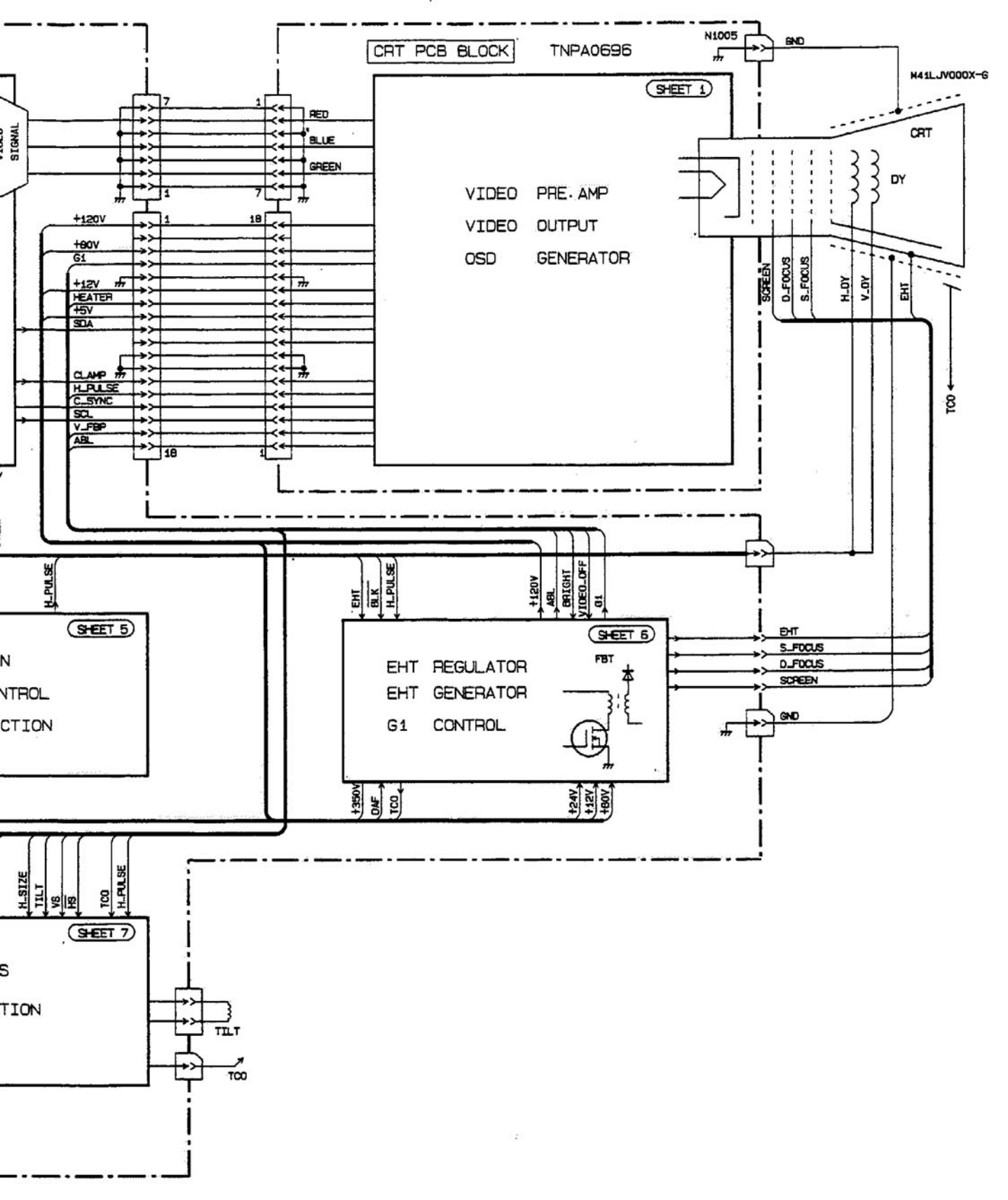
5. This schematic diagram is the letest at the time of printing and is subject to change without notice.

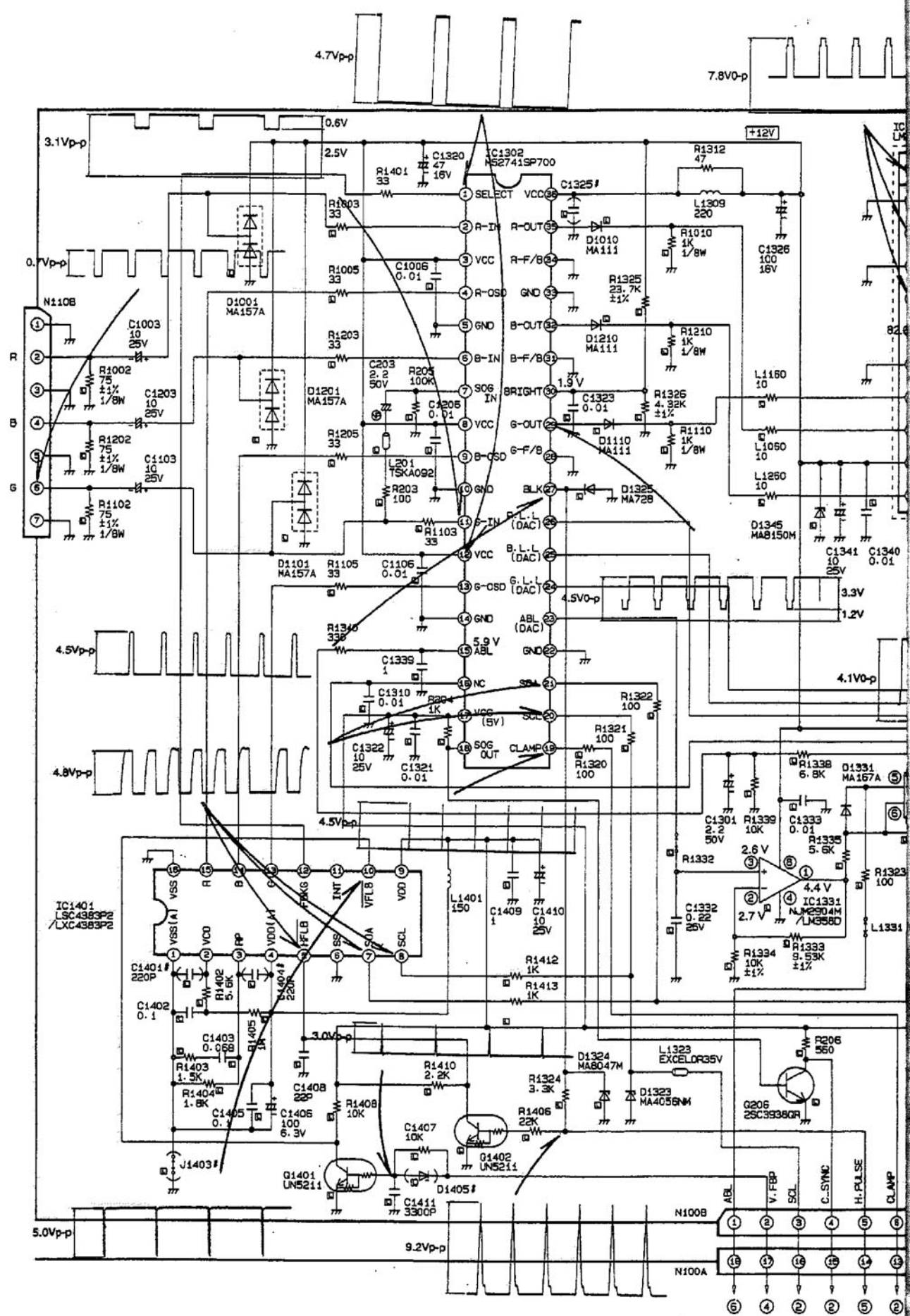
SERVICE NOTES :

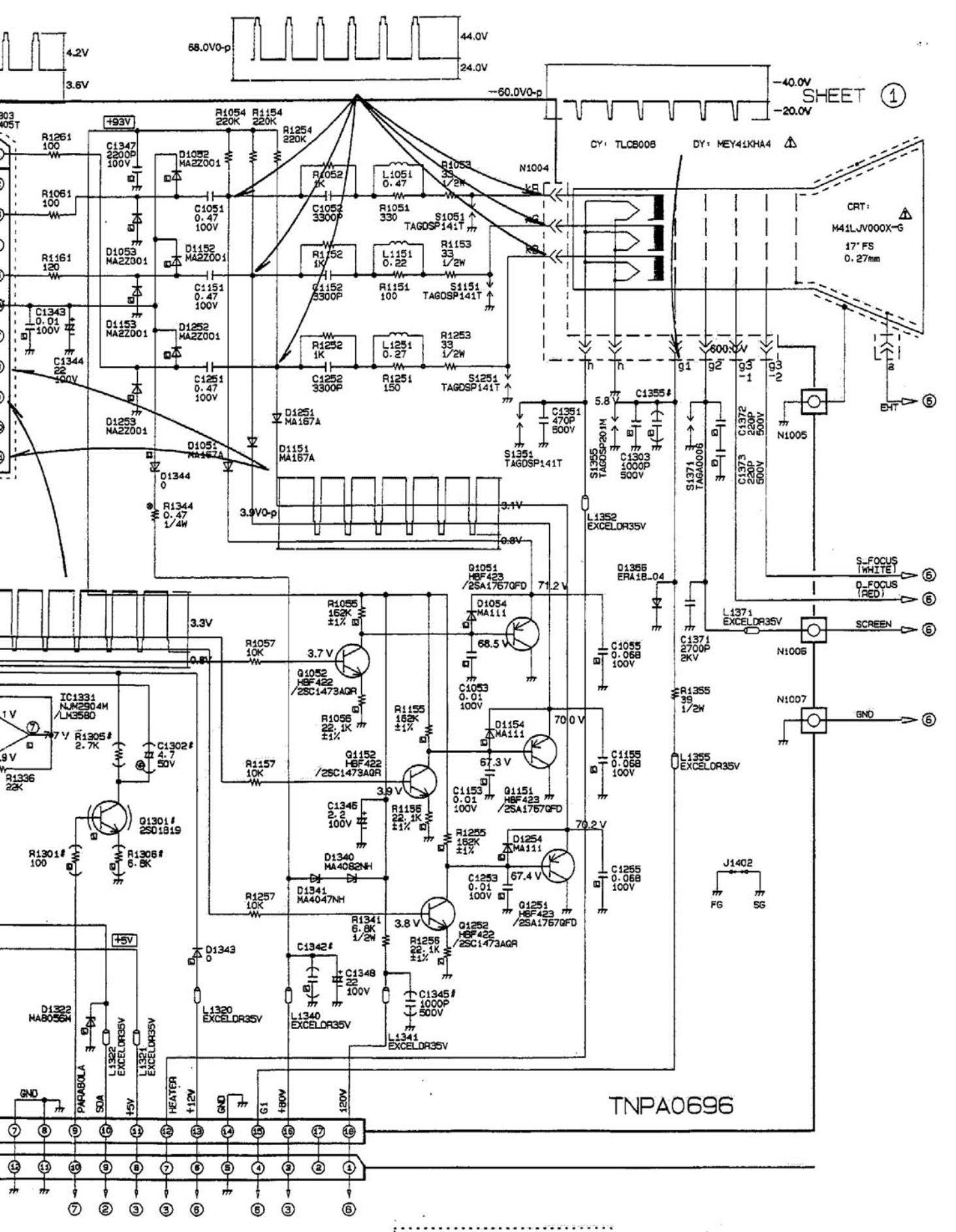
This model has a section that does not share a common ground with the power supply section. The different sections are referred to as the HOT section and the COLD section in the precautions below.

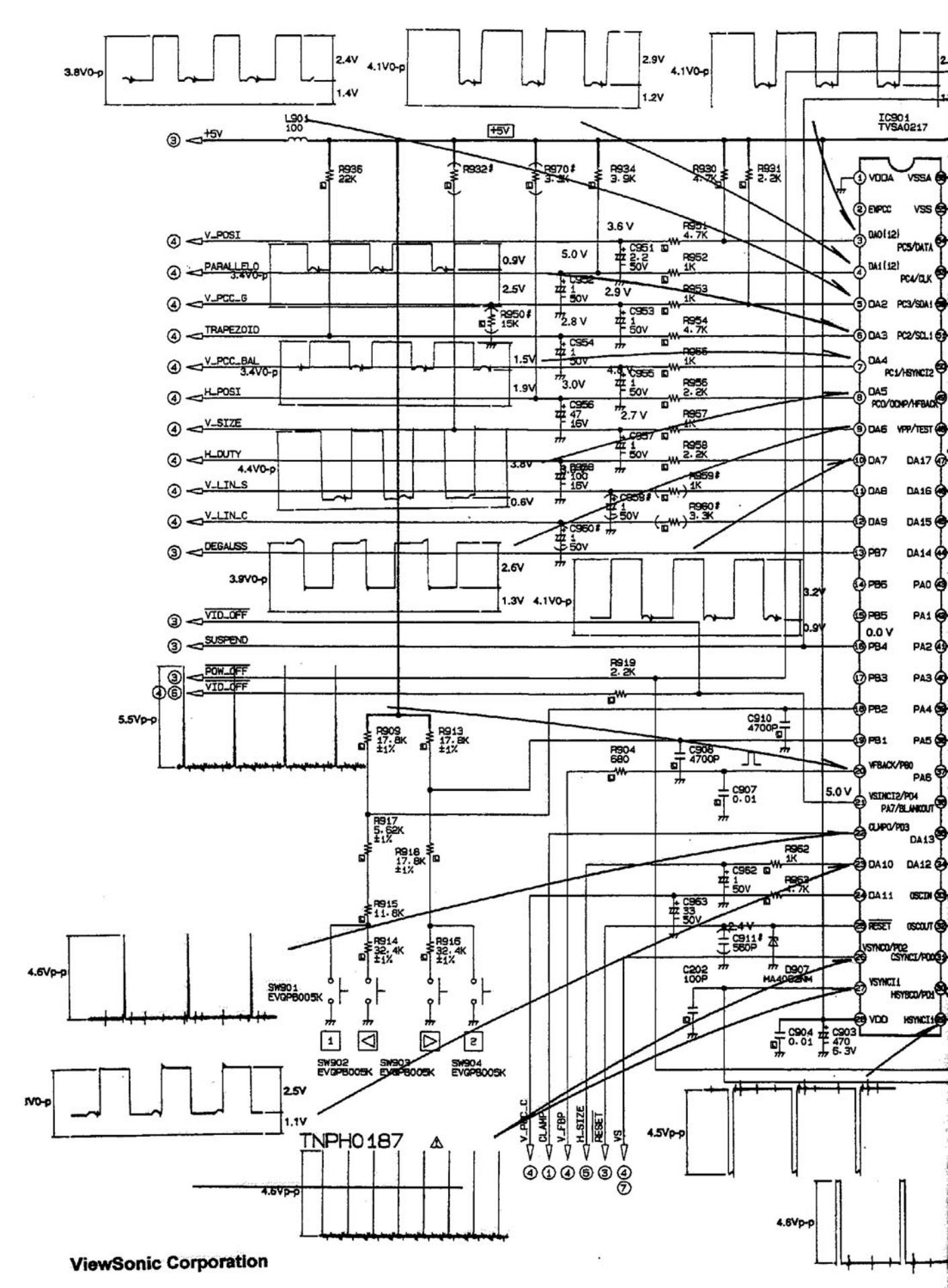
1. Do not touch the HOT section and the COLD section at the same time. You may receive an electric shock.
2. Do not short the HOT section to the COLD section. This could blow the fuse or damage parts.
3. Never measure the HOT section and the COLD section at the same time when using tools such as oscilloscopes or multimeters.
4. Always unplug the unit before beginning any operation such as removing the chassis.

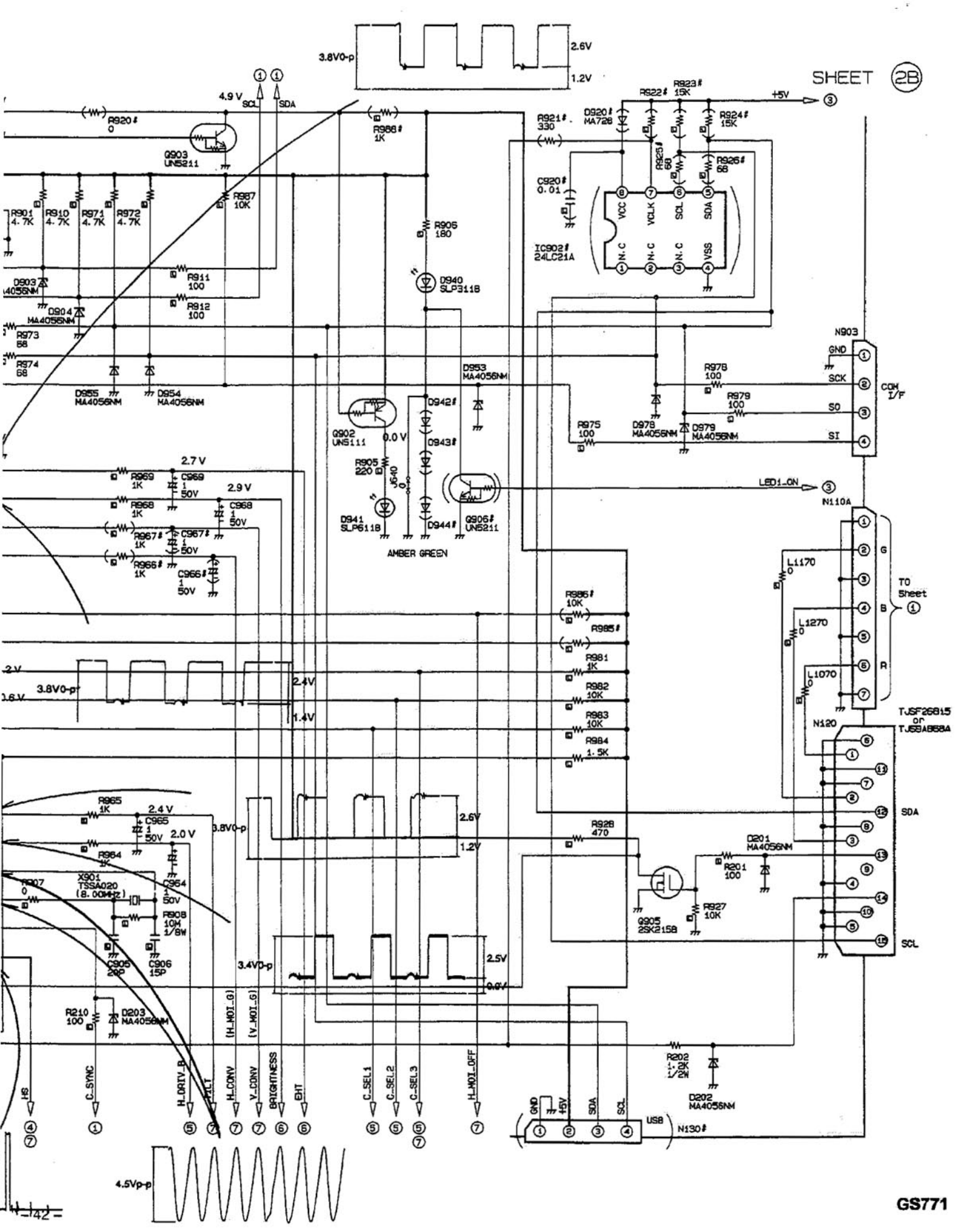

MAIN PCB BLOCK
TNPH01
SCHEMATIC DIAGRAM FOR
MODEL No. :
VCDTS21406-1
CHASSIS No.
GS771
SHEET 2
COM I/F
1 KEY
KEY
KEY
2 KEY
MCU/DDC
(USB)
GREEN
AMBER
POWER INDICATOR
+5V
RESET
GEOMETORY
SIZE&POSI
DEGAUSS
H_DRIVE_B
C_SEL1-3
POWER_OFF
TILT
VIDEO_OFF
HS/VS
SUSPEND
H_OUT
DEGAUSSING COIL
SHEET 3
PRIMARY CIRCUIT
AC DEGAUSS
SWITCHING CONTROL
LINE FILTER
ACIN
SW
POWER
GENERATOR
REGULATOR
PROTECTOR
+175V
H_PULSE
RESET
POWER_OFF
SUSPEND
DEGAUSS
H_LOCK
VPCC
H_DRIVE
HD
V_PCC
H_SIZE
H_DEFLECT
CHOPPER
H_LIN. COR
F_10V
F_GND
+5V
-15V
+80V
+24V
+15V
+12V
+8V
HEATER
+24V
+12V
F_10V
F_GND
-15V
+15V
+12V
HS
VS
GEOMETORY
SIZE&POSI
H_PULSE
H_LOCK
VIDEO_OFF
+80V
+12V
+8V
+350V
C_SEL3
SHEET 4
H/V_OSC
GEOMETRY CORRECTION
V_DEFLECTION
HD
H_OUT
H_LOCK
BLK
H_DRIVE
V_DY
V_SAW
MOIRE
V_FBP
H_DUTY
HD
DYNAMIC FO
OPTINAL FU
(TILT, TCO)

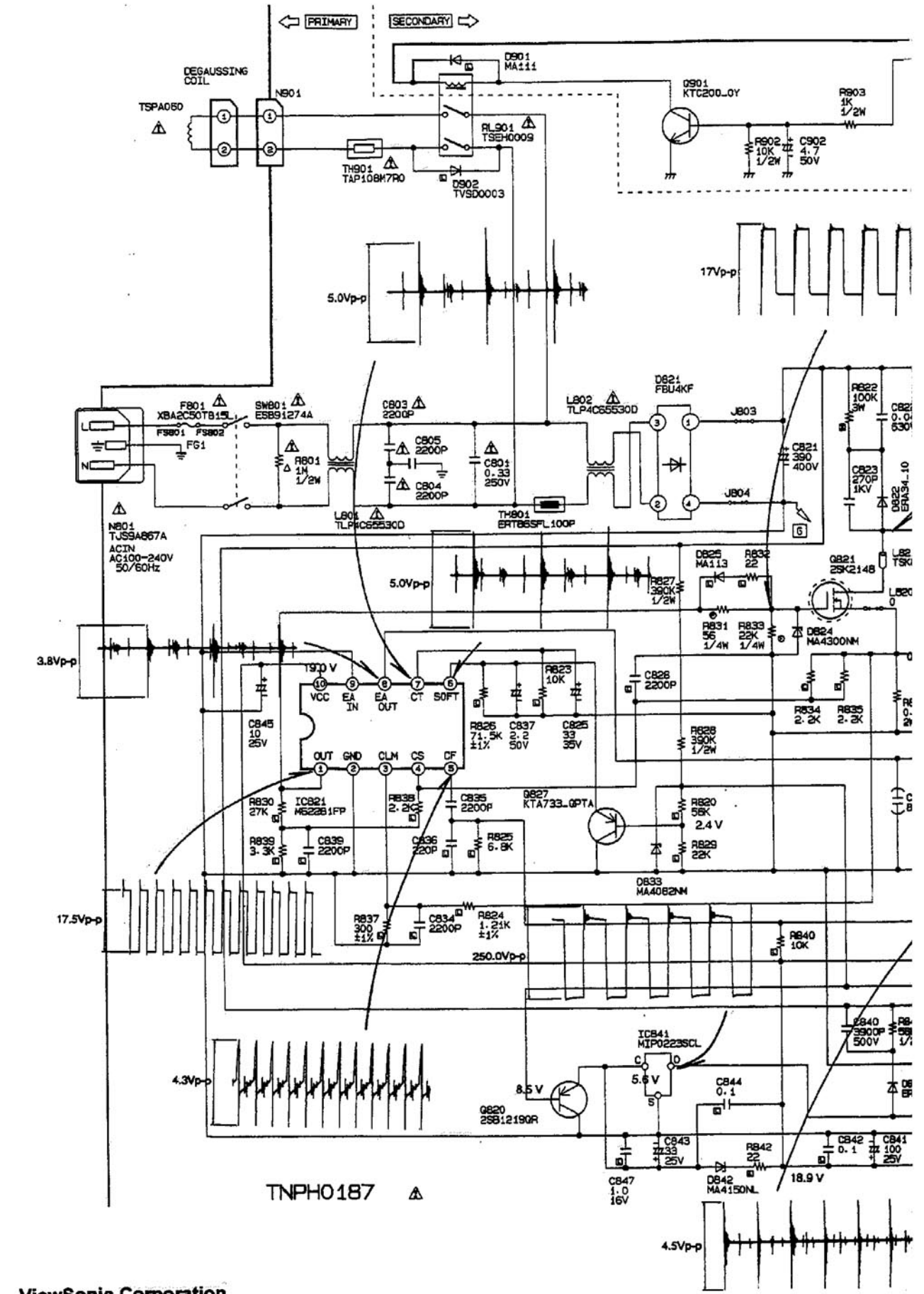

CRT PCB BLOCK
TNPA0696
SHEET 1
VIDEO PRE. AMP
VIDEO OUTPUT
OSD GENERATOR
N1005
GND
M41LJV000X-G
CRT
DY
RED
BLUE
GREEN
+120V
+90V
G1
+12V
HEATER
+5V
SDA
CLAMP
H_PULSE
C_SYNC
SCL
V_FBP
ABL
SCREEN
D_FOCUS
S_FOCUS
H_DY
V_DY
EHT
TCO
SHEET 5
SHEET 6
EHT REGULATOR
EHT GENERATOR
G1 CONTROL
FBT
BLK
BRIGHT
VIDEO_OFF
S_FOCUS
D_FOCUS
+350V
DAF
+24V
+12V
+80V
SHEET 7
H_SIZE
TILT
VS
HS
TILT
TCO


4.7Vp-p
7.8V0-p
3.1Vp-p
0.6V
2.5V
+12V
IC1302
M52741SP700
SELECT
A-IN
VCC
A-OSD
GND
B-IN
SOG IN
G-IN
B-OSD
B-F/B
G-OUT
B-OUT
R-OUT
R-F/B
BRIGHT
BLK
R.L.L (DAC)
B.L.L (DAC)
G.L.L (DAC)
ABL (DAC)
SDA
SCL
CLAMP
SOG OUT
VCC (5V)
ABL
NC
0.7Vp-p
N110B
D1001 MA157A
D1201 MA157A
D1101 MA157A
D1010 MA111
D1210 MA111
D1110 MA111
D1325 MA728
D1345 MA8150M
D1331 MA157A
L201 TSKA092
L1309 220
L1150 10
L1060 10
L1260 10
1.9V
5.9 V
4.5V0-p
3.3V
1.2V
4.5Vp-p
4.8Vp-p
4.1V0-p
IC1401 LSC4383P2 /LXC4383P2
L1401 150
L1331
2.6 V
2.7 V
4.4 V
IC1331 NJM2904M /LM358D
3.0Vp-p
D1324 MA8047M
L1323 EXCELOR35V
D1323 MA4056NM
Q206 2SC3938QR
Q1401 UN5211
Q1402 UN5211
D1405
J1403
5.0Vp-p
9.2Vp-p
N100B
N100A
ABL
V.FBP
SCL
C.SYNC
H.PULSE
CLAMP


SHEET 1
CY: TLCB006
DY: MEY41KHA4
CRT:
M41LJV000X-G
17" FS
0.27mm
+93V
+5V
600V
EHT
N1004
N1005
N1006
N1007
S_FOCUS (WHITE)
D_FOCUS (RED)
SCREEN
GND
J1402
FG
SG
PARABOLA
SDA
+5V
HEATER
+12V
GND
G1
+80V
120V
TNPA0696

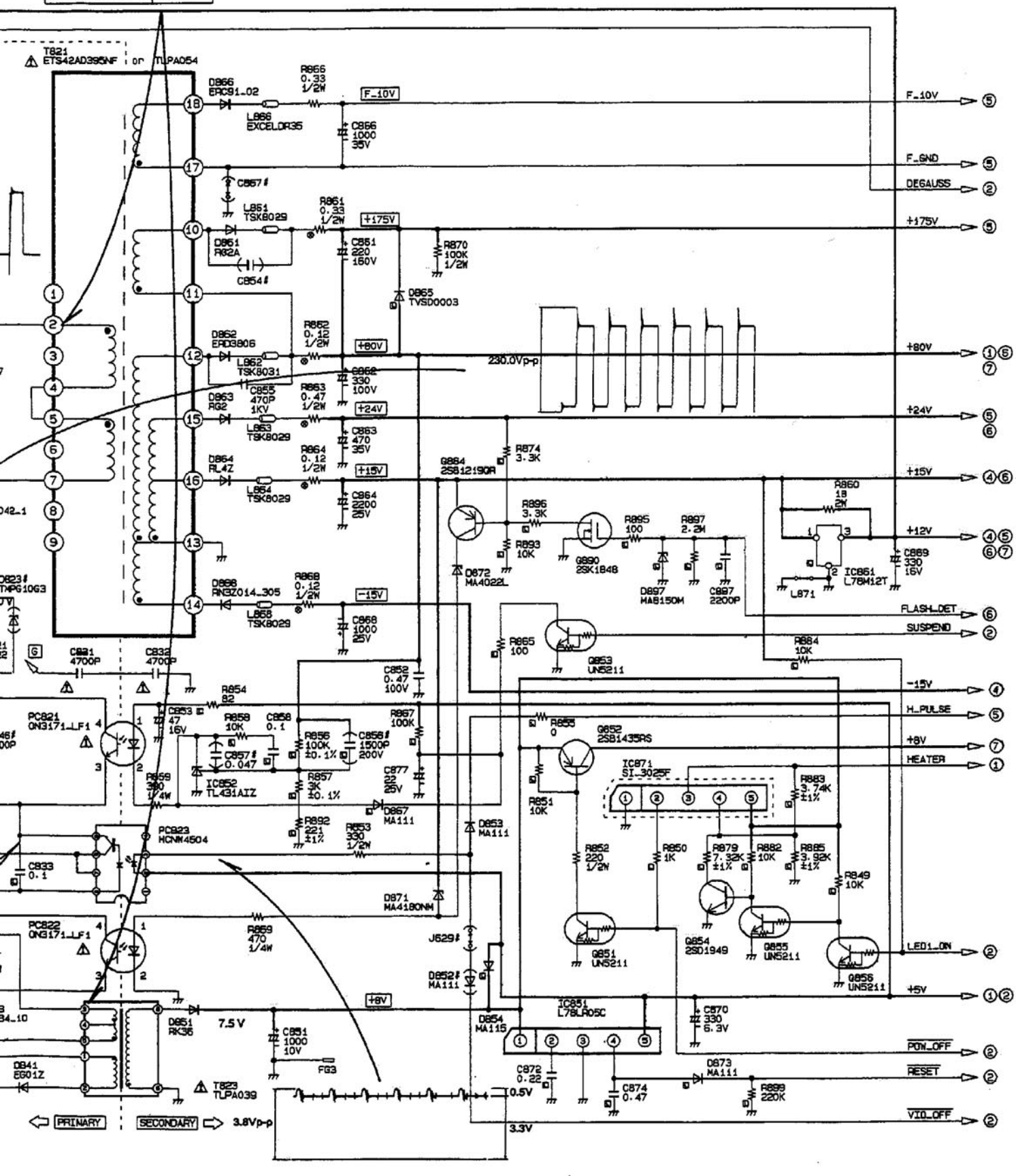

3.8V0-p
2.4V
1.4V
4.1V0-p
2.9V
1.2V
4.1V0-p
ICS01
TVSA0217
L901
100
+5V
R936
22K
R932#
R970#
3.3K
R934
3.9K
R930
4.7K
R931
2.2K
V_POSI
PARALLEL0
3.4V0-p
V_PCC_G
TRAPEZOID
V_PCC_BAL
3.4V0-p
H_POSI
V_SIZE
H_DUTY
4.4V0-p
V_LIN_S
V_LIN_C
DEGAUSS
3.9V0-p
VID_OFF
SUSPEND
POW_OFF
VID_OFF
5.5Vp-p
0.9V
2.5V
1.9V
3.8V
0.6V
2.6V
1.3V
4.1V0-p
3.6 V
5.0 V
2.9 V
2.8 V
3.0V
2.7 V
4.8 V
3.2V
0.9V
0.0 V
5.0 V
R950#
15K
R951
4.7K
R952
1K
R953
1K
R954
4.7K
R955
1K
R956
2.2K
R957
1K
R958
2.2K
R959#
1K
R960#
3.3K
R919
2.2K
C951
2.2
50V
C952
1
50V
C953
1
50V
C954
1
50V
C955
1
50V
C956
47
16V
C957
1
50V
C958
100
16V
C959#
1
50V
C960#
1
50V
C910
4700P
C908
4700P
C907
0.01
R904
680
R909
17.8K
±1%
R913
17.8K
±1%
R917
5.62K
±1%
R916
17.8K
±1%
R915
11.8K
R914
32.4K
±1%
R916
32.4K
±1%
SW901
EVQPB005K
SW902
EVQPB005K
SW903
EVQPB005K
SW904
EVQPB005K
4.6Vp-p
2.5V
1.1V
TNPH0187
4.6Vp-p
V_PCC_C
CLAMP
V_FBP
H_SIZE
RESET
VS
4.5Vp-p
4.6Vp-p
R962
1K
C962
1
50V
R963
4.7K
C963
33
50V
2.4 V
C911#
560P
D907
MA4082M4
C202
100P
C904
0.01
C903
470
6.3V
VDDA
VSSA
ENPCC
VSS
DA0(12)
PC5/DATA
DA1(12)
PC4/CLK
DA2
PC3/SDA1
DA3
PC2/SCL1
DA4
PC1/HSYNCI2
DA5
PC0/ODMP/HFBACK
DA6
VPP/TEST
DA7
DA17
DA8
DA16
DA9
DA15
PB7
DA14
PB6
PA0
PB5
PA1
PB4
PA2
PB3
PA3
PB2
PA4
PB1
PA5
VFBACK/PB0
PA6
VSINCI2/PD4
PA7/BLANKOUT
CLMPO/PD3
DA13
DA10
DA12
DA11
OSCIN
RESET
OSCOUT
VSYNCO/PD2
CSYNCI/PD0
VSYNCI1
HSYBCO/PD1
VDD
HSYNCI1

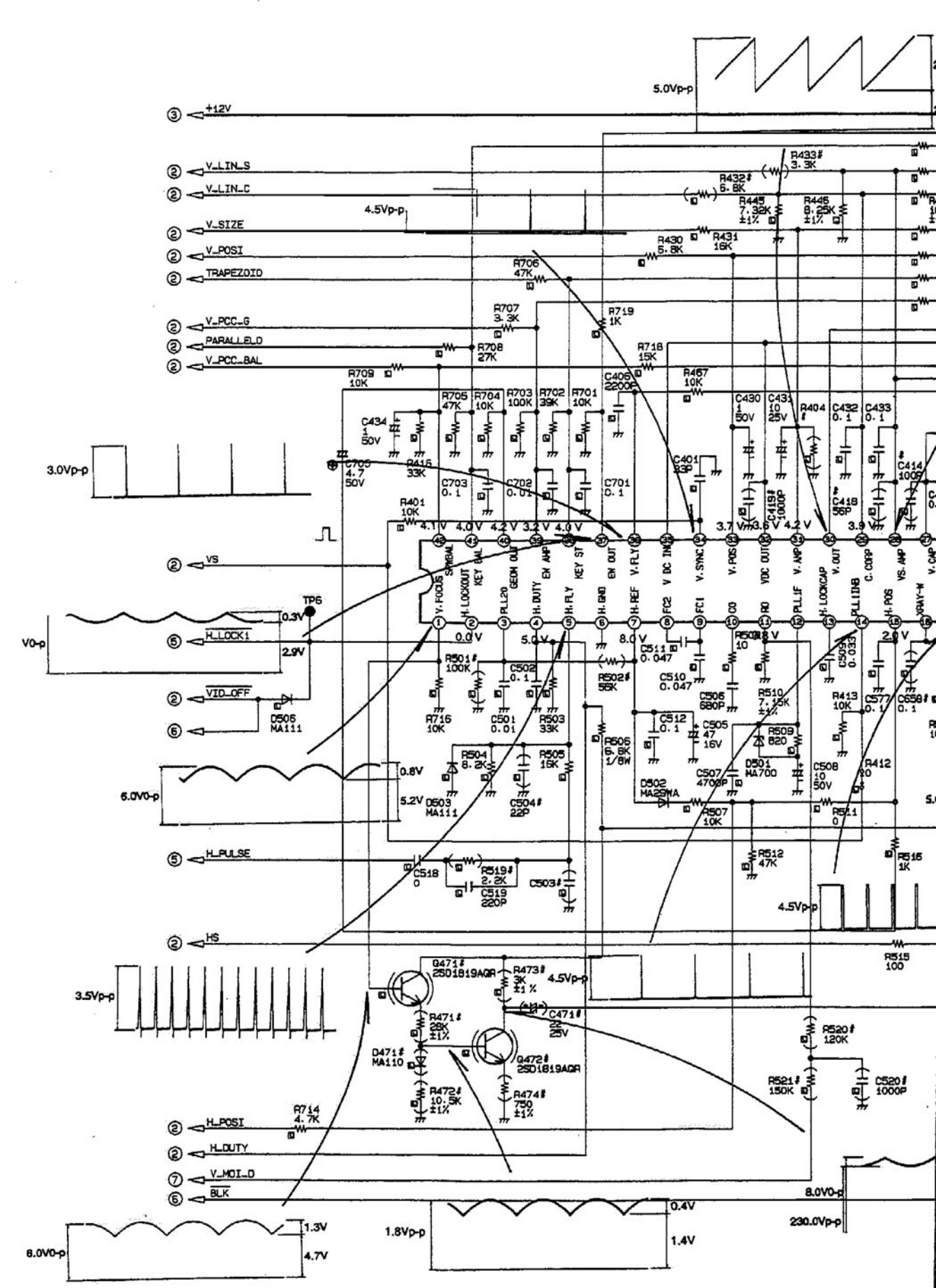

SHEET 28
3.8V0-p
2.6V
1.2V
4.9 V
SCL
SDA
Q903
UN5211
R920#
0
R986#
1K
R987
10K
R901
4.7K
R910
4.7K
R971
4.7K
R972
4.7K
R905
180
D940
SLP311B
R911
100
R912
100
D903
D904
MA4056NM
R973
68
R974
68
D955
MA4056NM
D954
MA4056NM
D953
MA4056NM
R921#
330
D920#
MA728
R922#
R923#
15K
R924#
15K
+5V
R925#
68
R926#
68
C920#
0.01
IC902#
24LC21A
VCC
VCLK
SCL
SDA
N.C
N.C
N.C
VSS
N903
GND
SCK
SO
SI
COM
I/F
R978
100
R979
100
R975
100
D978
MA4056NM
D979
MA4056NM
Q902
UN5111
0.0 V
D942#
D943#
R905
220
J640
D941
SLP611B
D944#
Q906#
UN5211
AMBER GREEN
LED1_ON
N110A
2.7 V
R969
1K
C969
1
50V
2.9 V
R968
1K
C968
1
50V
R967#
1K
C967#
1
50V
R966#
1K
C966#
1
50V
L1170
0
L1270
0
L1070
0
G
B
R
TO
Sheet
1
TJSF26815
or
TJSBAB68A
N120
R986#
10K
R985#
R981
1K
R982
10K
R983
10K
R984
1.5K
2.4V
1.4V
3.8V0-p
R965
1K
2.4 V
C965
1
50V
2.0 V
R964
1K
X901
TSSA020
(8.00MHz)
C964
50V
R907
0
R908
10M
1/8W
C905
20P
C906
15P
3.8V0-p
2.6V
1.2V
R928
470
D201
MA4056NM
R201
100
Q905
2SK2158
R927
10K
SDA
SCL
3.4V0-p
2.5V
0.0V
R210
100
D203
MA4056NM
R202
100
D202
MA4056NM
USB
N130#
GND
+5V
SDA
SCL
HS
C_SYNC
H_DRIV_B
FBLT
H_CONV
V_CONV
BRIGHTNESS
EHT
C_SEL1
C_SEL2
C_SEL3
H_MOI_OFF
(H_MOI_G)
(V_MOI_G)
4.5Vp-p
-142-
GS771

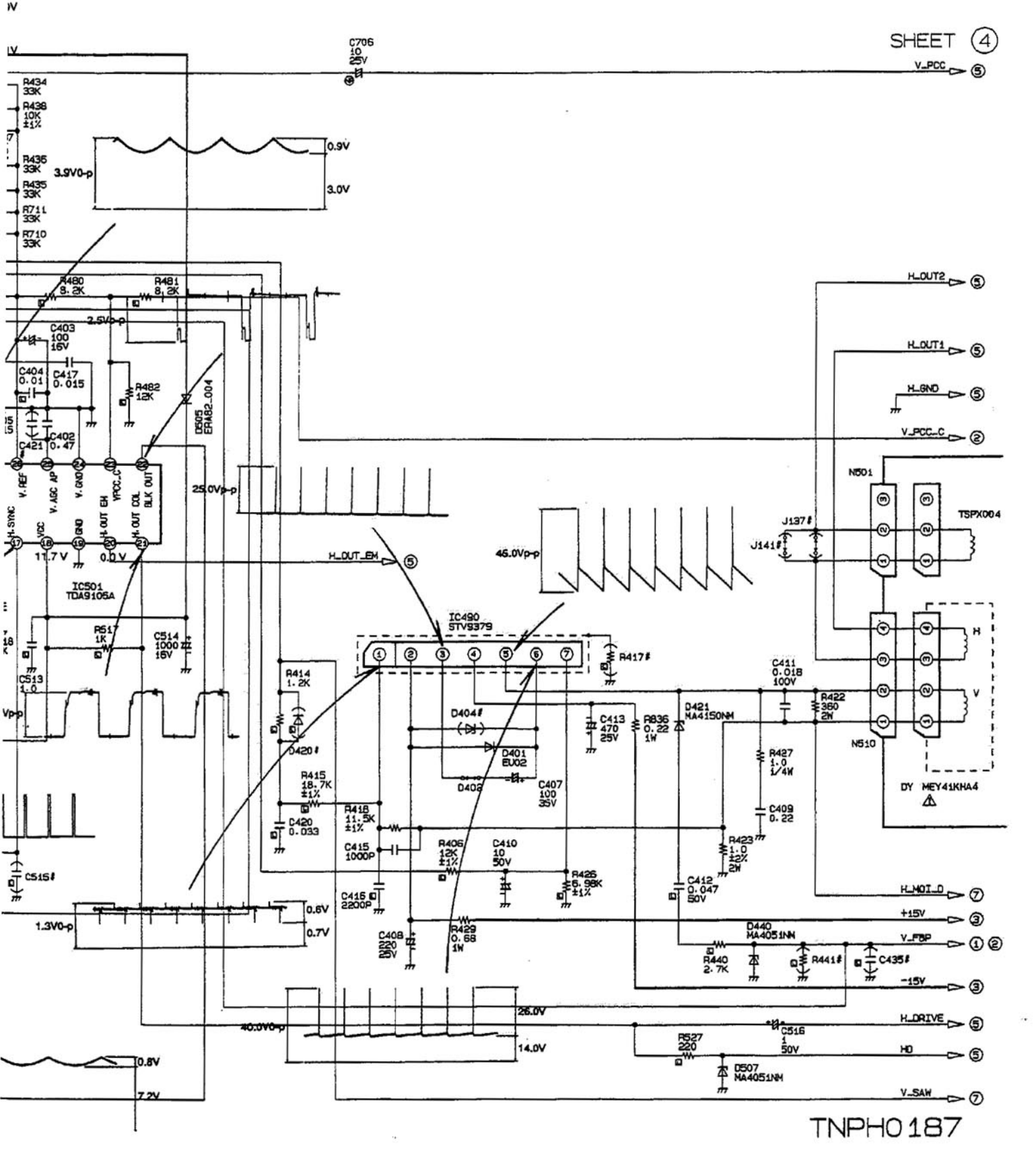

PRIMARY
SECONDARY
DEGAUSSING COIL
TSPA050
N801
D901 MA111
RL901 TSEH0009
TH901 TAP108M7R0
D902 TVSD0003
Q901 KTC200_0Y
R903 1K 1/2W
R902 10K 1/2W
C902 4.7 50V
5.0Vp-p
17Vp-p
F801 XBA2C50TB15L
FS801
FS802
FG1
SW801 ESB91274A
C803 2200P
C805 2200P
C804 2200P
C801 0.33 250V
R801 1M 1/2W
L802 TLP4C65530D
L801 TLP4C65530D
TH801 ERTB6SFL100P
D821 FBU4KF
JB03
JB04
C821 390 400V
R822 100K 3W
C823 270P 1KV
D822 ERA34-10
N801 TJS9A867A
ACIN
AC100-240V 50/60Hz
D825 MA113
R832 22
Q821 2SK2148
R827 390K 1/2W
R831 56 1/4W
R833 22K 1/4W
D824 MA4300NM
3.8Vp-p
T910 V
VCC
EA IN
EA OUT
CT
SOFT
C845 10 25V
R823 10K
R826 71.5K ±1%
C837 2.2 50V
C825 33 35V
C826 2200P
R834 2.2K
R835 2.2K
R828 390K 1/2W
OUT
GND
CLM
CS
CF
IC821 M52381FP
R830 27K
R838 2.2K
C835 2200P
R839 3.3K
C839 2200P
C836 220P
R825 6.8K
Q827 KTA733_0PTA
R820 56K
2.4 V
R829 22K
D833 MA4082NM
17.5Vp-p
R837 300 ±1%
C834 2200P
R824 1.21K ±1%
250.0Vp-p
R840 10K
IC841 MIP0223SCL
5.6 V
C844 0.1
C840 3900P 500V
4.3Vp-p
8.5 V
Q820 2SB1219QR
C843 33 25V
R842 22
C842 0.1
C841 100 25V
C847 1.0 16V
D842 MA4150NL
18.9 V
4.5Vp-p
TNPH0187

AT AC100V	122V
AT AC100V	122V
AT AC120V	150V
AT AC220V	280V
AT AC240V	306V

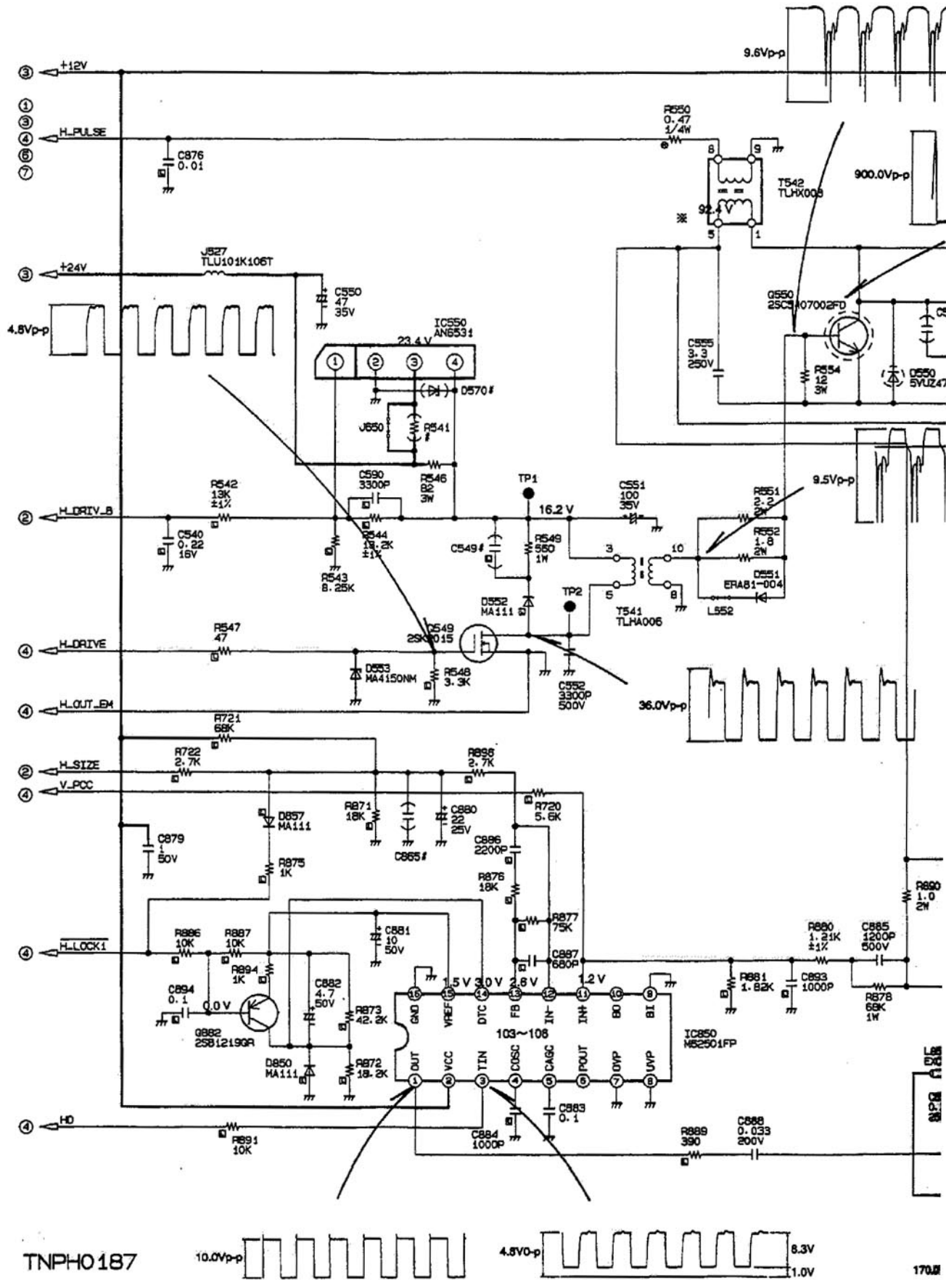
SHEET (3A)



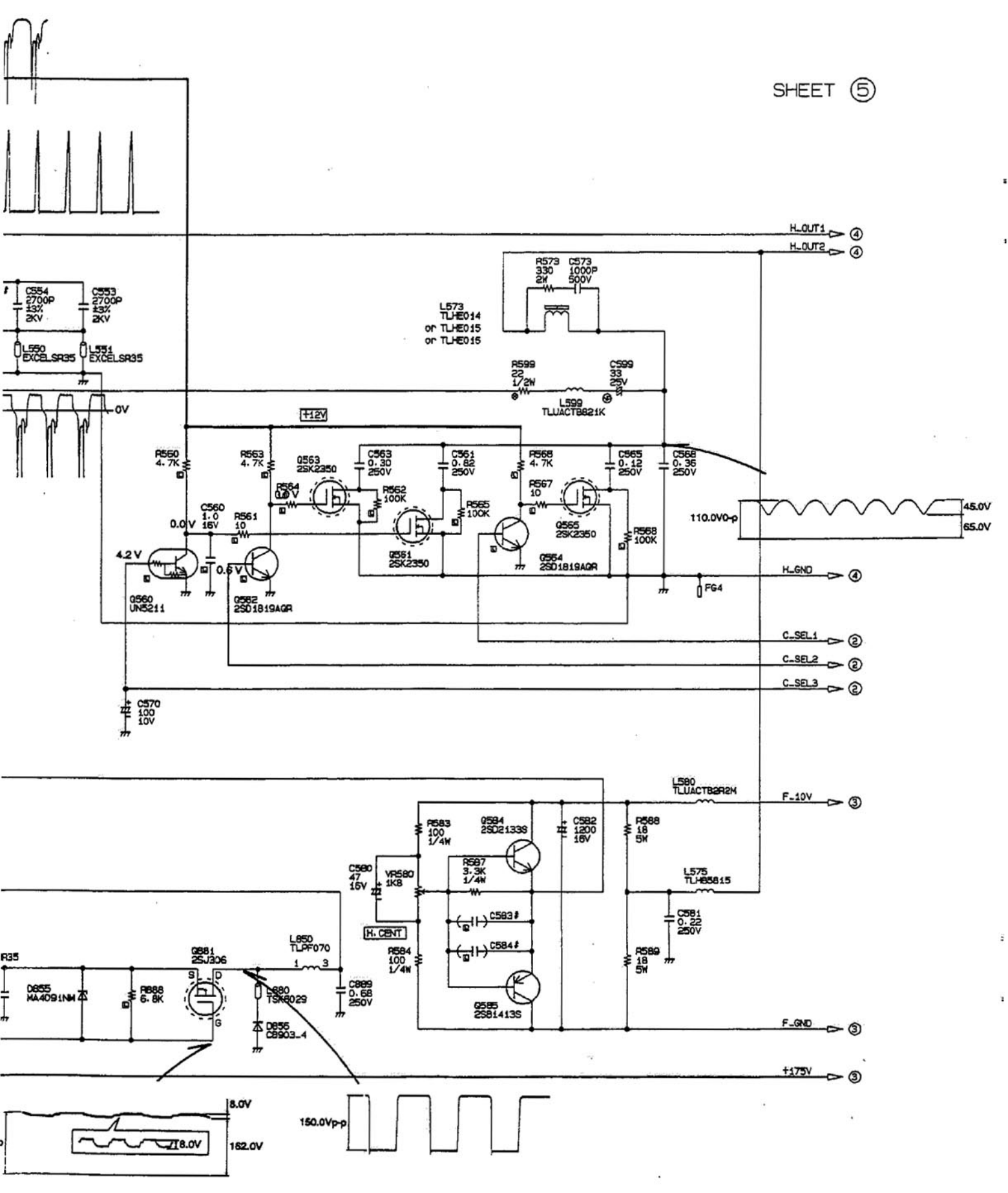

+12V
V_LIN_S
V_LIN_C
V_SIZE
V_POSI
TRAPEZOID
V_PCC_G
PARALLELD
V_PCC_BAL
VS
H_LOCK1
VID_OFF
H_PULSE
HS
H_POSI
H_DUTY
V_MOI_D
BLK
5.0Vp-p
4.5Vp-p
3.0Vp-p
6.0V0-p
3.5Vp-p
1.8Vp-p
8.0V0-p
230.0Vp-p
R433# 3.3K
R432# 5.6K
R445 7.32K ±1%
R446 9.25K ±1%
R430 5.6K
R431 16K
R706 47K
R707 3.3K
R719 1K
R708 27K
R718 15K
R709 10K
R467 10K
C406 2200P
R705 47K
R704 10K
R703 100K
R702 39K
R701 10K
C430 50V
C431 25V
R404
C432 0.1
C433 0.1
C434 50V
C705 4.7 50V
R416 33K
C703 0.1
C702 0.01
C701 0.1
C401
C419# 1000P
C418 56P
C414 100P
R401 10K
4.1V 4.0V 4.2V 3.2V 4.0V 3.7V 3.6V 4.2V 3.9
Y. FOCUS
H. LOCKOUT
KEY BAL
PLL20
GEOM OUT
EW AMP
KEY ST
EW OUT
H. GND
H. REF
V DC IN
V. SYNC
V. POS
VDC OUT
V. AMP
V. OUT
C. COMP
VS. AMP
TP6
0.3V
2.9V
0.0V
5.0V
8.0V
2.0V
R501# 100K
C502 0.1
R502# 55K
C511 0.047
C510 0.047
R500 10
C506 680P
R510 7.15K ±1%
R716 10K
C501 0.01
R503 33K
C512 0.1
C505 47 16V
R509 820
R413 10K
C577 0.1
C559 0.1
R506 6.8K 1/8W
D501 MA700
C508 10 50V
R412 20
R504 8.2K
R505 15K
0.8V
5.2V
D503 MA111
C504# 22P
D502 MA2SMA
R507 10K
R511 0
R512 47K
R515 1K
C518 0
R519# 2.2K
C519 220P
C503#
R515 100
Q471# 2SD1819AQR
R473# 3K ±1%
C471# 22 25V
R471# 26K ±1%
D471# MA110
Q472# 2SD1819AQR
R472# 10.5K ±1%
R474# 750 ±1%
R520# 120K
R521# 150K
C520# 1000P
R714 4.7K
1.3V
4.7V
0.4V
1.4V

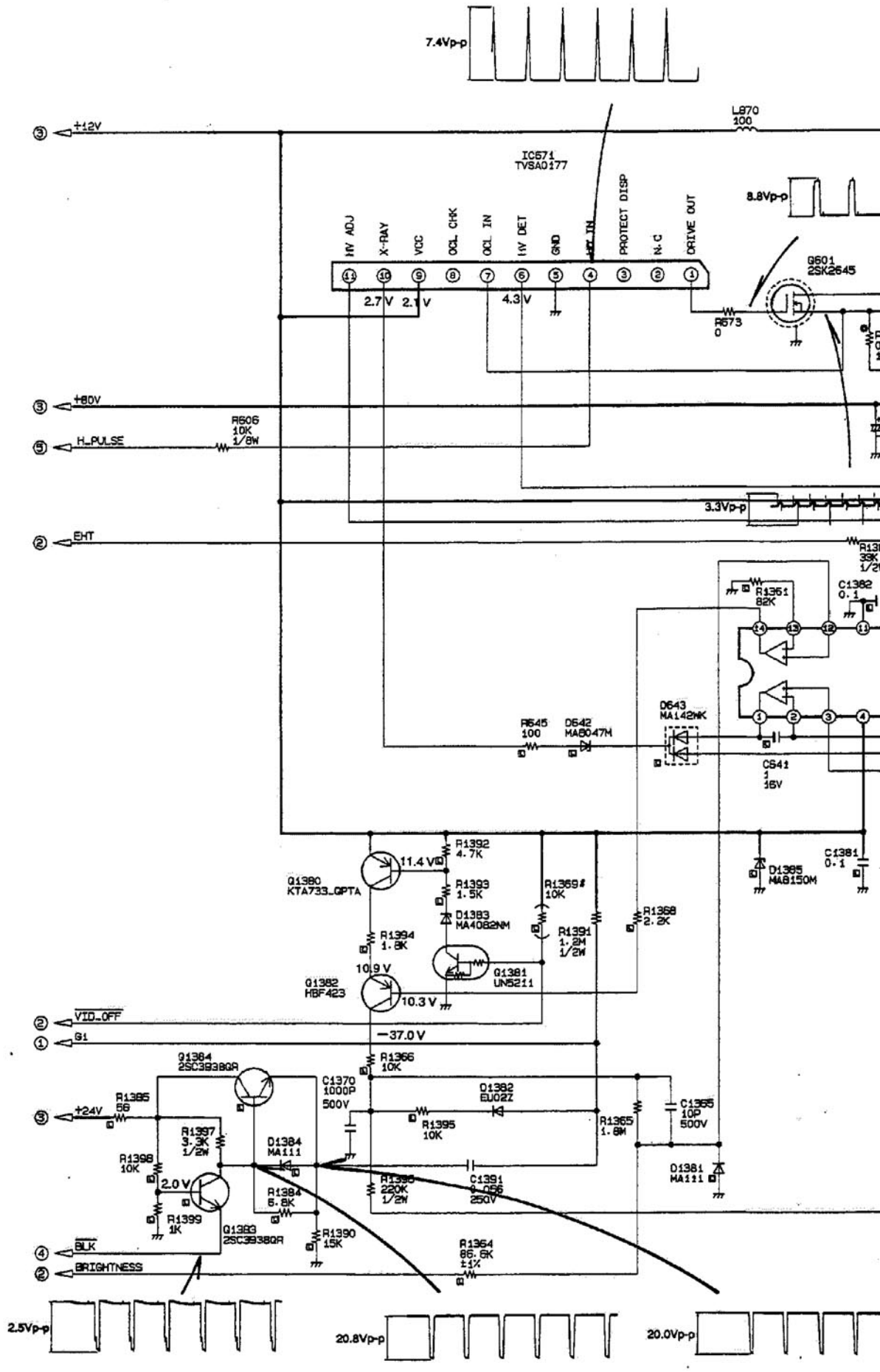

SHEET 4
V_PCC
C706 10 25V
R434 33K
R436 10K ±1%
R435 33K
R435 33K
R711 33K
R710 33K
3.9V0-p
0.9V
3.0V
R480 8.2K
R481 8.2K
2.5Vp-p
C403 100 16V
C404 0.01
C417 0.015
R482 12K
C421
C402 0.47
D505 ERA82-004
V_REF
V_AGC AP
V_GND
VPCC_C
H_OUT EH
H_OUT COL BLK OUT
H_SYNC
VDC
GND
H_OUT EH
H_OUT COL BLK OUT
11.7 V
0.0 V
25.0Vp-p
IC501 TDA9105A
H_OUT_EH
46.0Vp-p
IC490 STV9379
R517 1K
C514 1000 16V
C513 1.0
Vp-p
R414 1.2K
D420#
R415 18.7K ±1%
C420 0.033
C515#
R418 11.5K ±1%
C415 1000P
R406 12K ±1%
C410 10 50V
R426 6.98K ±1%
C416 2200P
C408 2200 25V
R429 0.68 1W
D404#
D401 EU02
D402
C407 100 35V
C413 470 25V
R836 0.22 1W
D421 MA4150NM
R417#
C411 0.018 100V
R422 360 2W
R427 1.0 1/4W
C409 0.22
R423 1.0 ±2% 2W
C412 0.047 50V
D440 MA4051NM
R440 2.7K
R441#
C435#
-15V
+15V
V_F6P
H_OUT2
H_OUT1
H_GND
V_PCC_C
N501
TSPX004
J137#
J141#
H
V
N510
DY MEY41KHA4
H_VOT_D
H_DRIVE
C516 1 50V
R527 220
D507 MA4051NM
HD
V_SAW
1.3V0-p
0.6V
0.7V
40.0V0-p
26.0V
14.0V
0.8V
7.2V

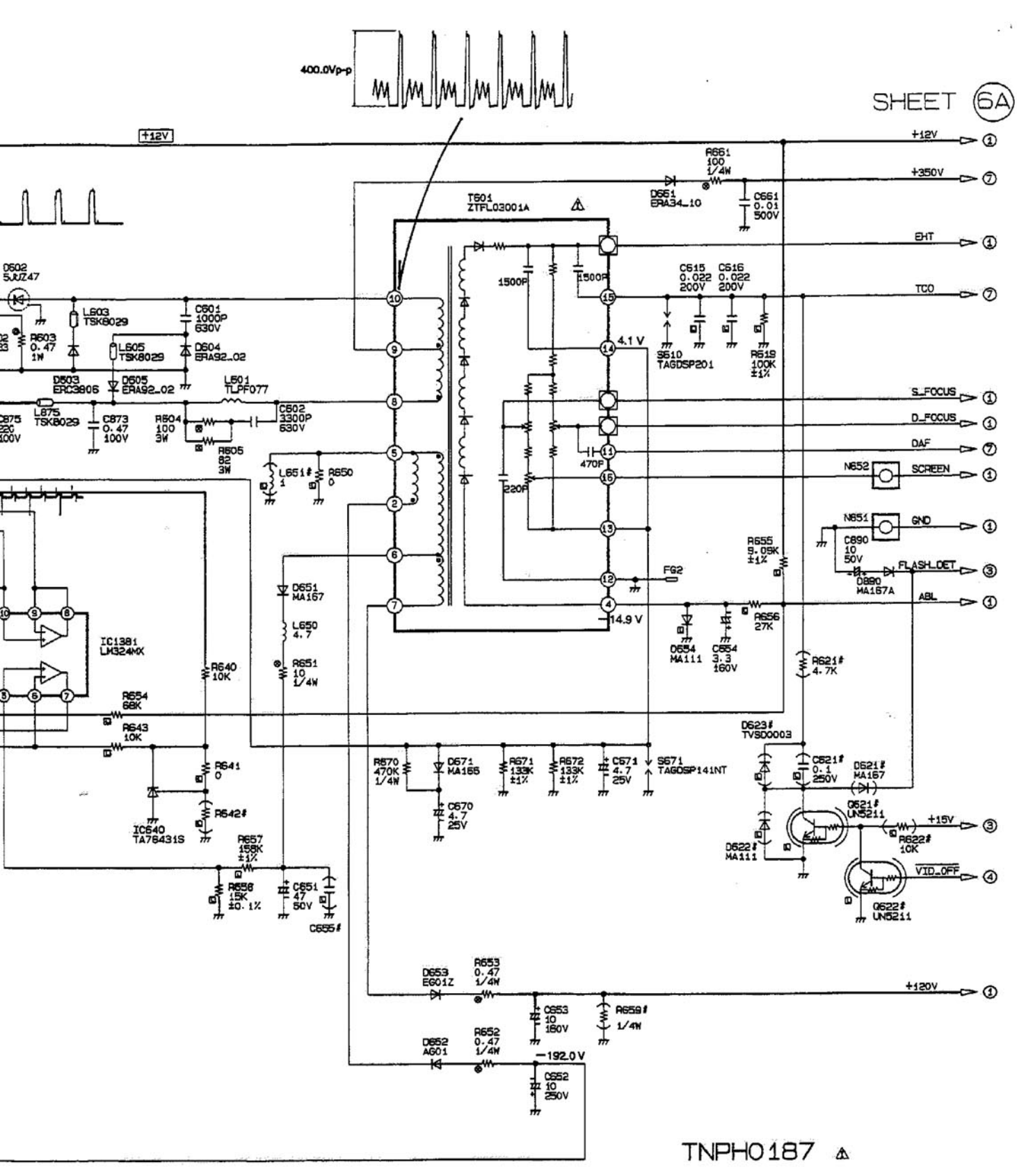
TNPH0187


+12V
H_PULSE
C876 0.01
R550 0.47 1/4W
T542 TLHX008
9.6Vp-p
900.0Vp-p
92.4V
+24V
J527 TLU101K106T
C550 47 35V
4.8Vp-p
IC550 AN6531
23.4 V
D570#
J650
R541 #
Q550 2SC5107002FD
C555 9.3 250V
R554 12 3W
D550 5YUZ47
R542 13K ±1%
C590 3300P
R546 3W
TP1
16.2 V
C551 100 35V
R551 2.2 2W
R552 1.8 2W
D551 ERA81-004
L552
H_DRIV_B
C540 0.22 16V
R544 18.2K ±1%
R543 8.25K
C549#
R549 560 1W
T541 TLHA006
D552 MA111
TP2
9.5Vp-p
H_DRIVE
R547 47
Q549 2SK3015
D553 MA4150NM
R548 3.3K
C552 3300P 500V
H_OUT_EW
36.0Vp-p
R721 68K
H_SIZE
R722 2.7K
R896 2.7K
V_PCC
R720 5.6K
D857 MA111
R871 18K
C880 220 25V
C879 1 50V
C865#
C886 2200P
R875 1K
R876 18K
R877 75K
R890 1.0 2W
H_LOCK1
R886 10K
R887 10K
C881 10 50V
R894 1K
C882 4.7 50V
C894 0.1
0.0 V
Q882 2SB1219QR
R873 42.2K
D850 MA111
R872 18.2K
C887 680P
1.5 V
3.0 V
2.8 V
1.2 V
GND
VREF
DTC
FB
IN-
IN+
BO
BI
OUT
VCC
TIN
COSC
CAGC
POUT
OVP
UVP
103~106
IC850 M52501FP
C883 0.1
C884 1000P
R880 1.21K ±1%
C885 1200P 500V
R881 1.82K
C893 1000P
R878 68K 1W
R889 390
C888 0.033 200V
HD
R891 10K
TNPH0187
10.0Vp-p
4.8V0-p
6.3V
1.0V

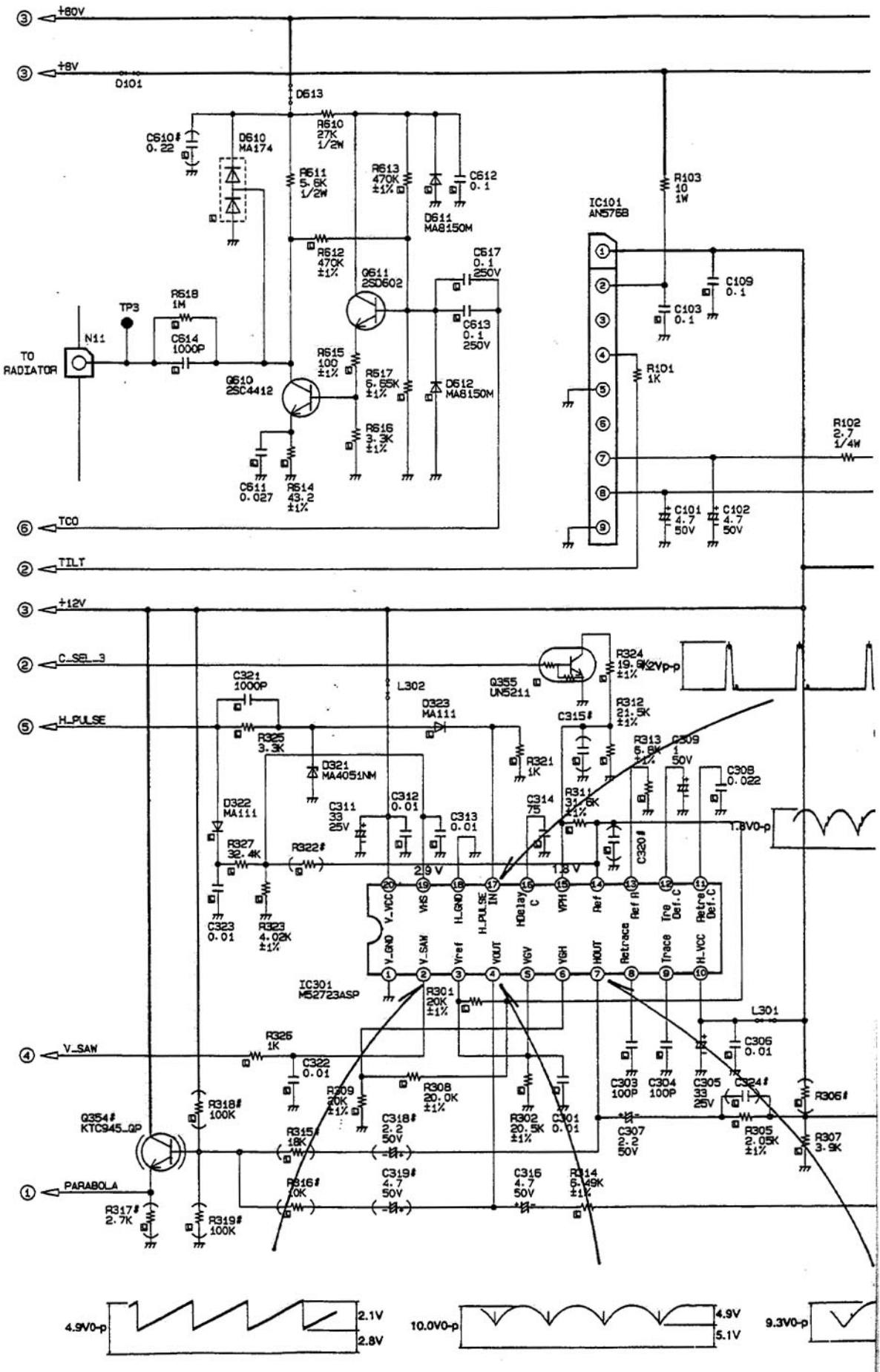
SHEET ⑤

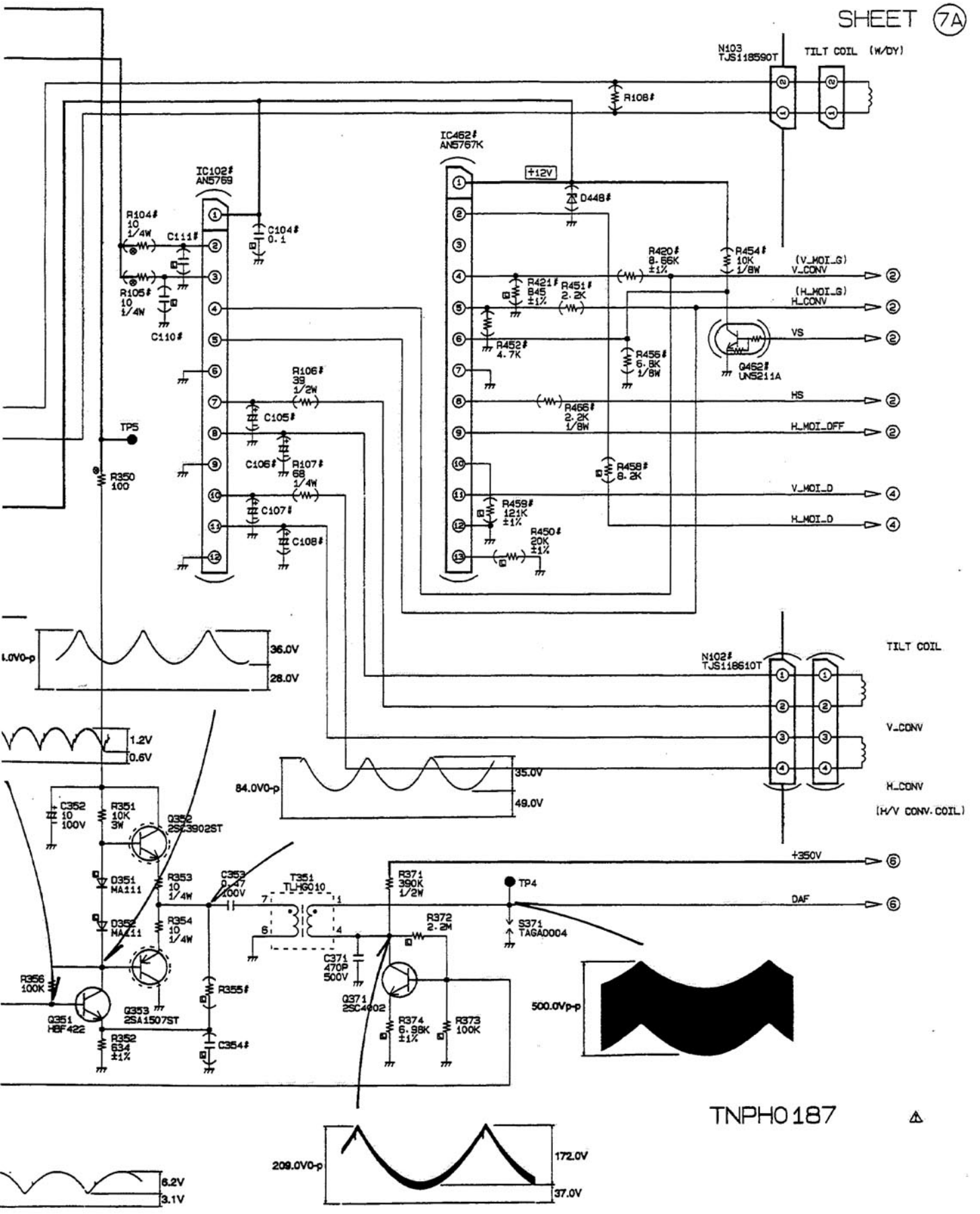

H_OUT1 ④
H_OUT2 ④
R573 330 2W
C573 1000P 500V
L573 TLHE014 or TLHE015 or TLHE015
C554 2700P ±3% 2KV
C553 2700P ±3% 2KV
L550 EXCELSR35
L551 EXCELSR35
R599 22 1/2W
C599 33 25V
L599 TLUACT8821K
0V
+12V
R560 4.7K
R563 4.7K
Q563 2SK2350
C563 0.30 250V
C561 0.82 250V
R568 4.7K
C565 0.12 250V
C568 0.36 250V
R564 0.0V
R562 100K
R565 100K
R567 10
C560 1.0 16V
R561 10
0.0V
4.2V
0.6V
Q560 UN5211
Q562 2SD1819AQR
Q561 2SK2350
Q565 2SK2350
Q564 2SD1819AQR
R568 100K
110.0Vp-p
45.0V
65.0V
H_GND ④
FG4
C_SEL1 ②
C_SEL2 ②
C_SEL3 ②
C570 100 10V
L580 TLUACT82R2M
F_10V ③
R583 100 1/4W
Q584 2SD2133S
C582 1200 16V
R588 18 5W
C580 47 16V
VR580 1KB
R587 3.3K 1/4W
L575 TLH85815
C583#
C584#
H.CENT
C581 0.22 250V
R584 100 1/4W
R589 18 5W
Q585 2SB1413S
F_GND ③
+17.5V ③
R35
D855 MA4091N4
R888 6.8K
Q881 2SJ306
S D G
L850 TLPF070
1 3
L680 TSK6029
D856 CB903-4
C809 0.68 250V
8.0V
16.0V
162.0V
150.0Vp-p


7.4Vp-p
+12V
L870
100
IC571
TVSA0177
HV ADJ
X-RAY
VCC
OCL CHK
OCL IN
HV DET
GND
HOT IN
PROTECT DISP
N.C
DRIVE OUT
8.8Vp-p
Q601
2SK2645
2.7V
2.1V
4.3V
R673
0
+80V
R606
10K
1/8W
H_PULSE
3.3Vp-p
EHT
R1361
82K
C1382
0.1
D643
MA142WK
R645
100
D642
MA8047M
C541
1
16V
R1392
4.7K
11.4 V
Q1380
KTA733_GPTA
R1393
1.5K
R1369#
10K
D1383
MA4082WM
R1368
2.2K
R1394
1.8K
R1391
1.2M
1/2W
10.9 V
Q1382
HBF423
Q1381
UN5211
10.3 V
C1381
0.1
D1385
MA8150M
VID_OFF
G1
-37.0 V
Q1384
2SC3938QR
R1366
10K
C1370
1000P
500V
D1382
EU02Z
+24V
R1385
56
R1397
3.3K
1/2W
R1395
10K
R1365
1.8M
C1365
10P
500V
R1398
10K
D1384
MA111
2.0 V
R1396
220K
1/2W
C1391
0.056
250V
D1381
MA111
R1384
6.8K
R1399
1K
Q1383
2SC3938QR
R1390
15K
BLK
BRIGHTNESS
R1364
86.6K
±1%
2.5Vp-p
20.8Vp-p
20.0Vp-p

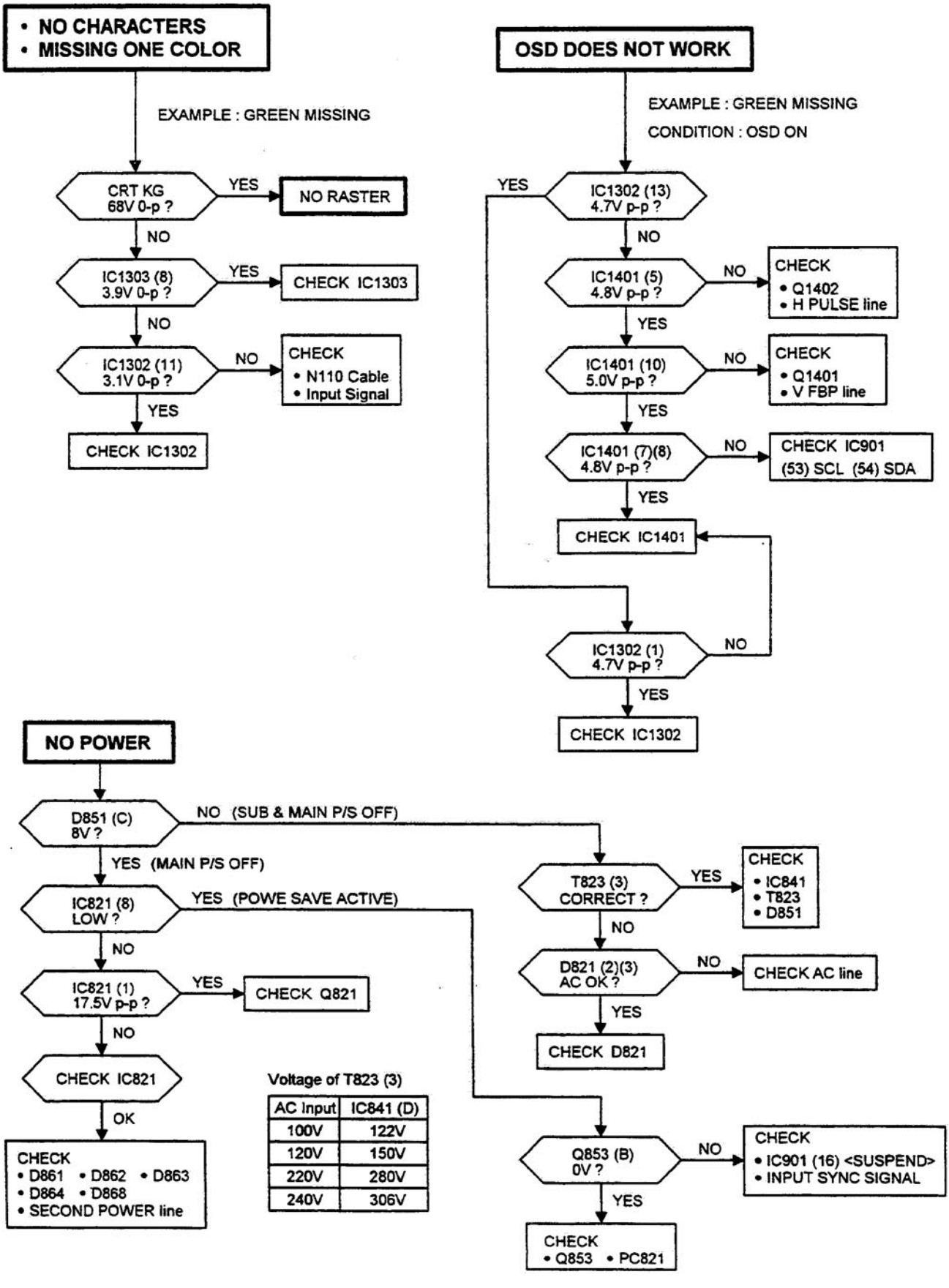

400.0Vp-p
SHEET 6A
+12V
T601 ZTFL03001A
D661 ERA34-10
R661 100 1/4W
C661 0.01 500V
+12V
+350V
EHT
TCO
S_FOCUS
D_FOCUS
DAF
SCREEN
GND
FLASH_DET
ABL
+120V
-192.0V
4.1 V
14.9 V
FG2
D602 5.6UZ47
L603 TSK8029
L605 TSK8029
D603 ERC3806
D604 ERA92-02
D605 ERA92-02
L501 TLPF077
L875 TSK8029
C501 1000P 630V
C502 3300P 630V
C873 0.47 100V
C875 220 100V
R603 0.47 1W
R604 100 3W
R605 82 3W
L651# 1
R650 0
1500P
1500P
C615 0.022 200V
C616 0.022 200V
S610 TAGDSP201
R619 100K ±1%
470P
220P
N852
N851
C890 10 50V
D890 MA167A
R655 9.09K ±1%
R656 27K
D654 MA111
C654 3.3 160V
R621# 4.7K
D651 MA167
L650 4.7
R651 10 1/4W
IC1381 LM324MX
R640 10K
R654 68K
R643 10K
R641 0
R642# IC640 TA78431S
R657 158K ±1%
R658 15K ±0.1%
C651 47 50V
C655#
R670 470K 1/4W
D671 MA165
C670 4.7 25V
R671 133K ±1%
R672 133K ±1%
C671 4.7 25V
S671 TAGDSP141NT
D623# TVS00003
C621# 0.1 250V
D621# MA167
Q621# UN5211
R622# 10K
D622# MA111
Q622# UN5211
+15V
VID_OFF
D653 EG01Z
R653 0.47 1/4W
C653 10 160V
R659# 1/4W
D652 AG01
R652 0.47 1/4W
C652 10 250V

TNPH0187 ⚠


+80V
+8V
D101
D613
R610 27K 1/2W
C610# 0.22
D610 MA174
R611 5.6K 1/2W
R613 470K ±1%
C612 0.1
D611 MA8150M
R612 470K ±1%
Q611 2SD602
C617 0.1 250V
C613 0.1 250V
R618 1M
TP3
N11
TO RADIATOR
C614 1000P
R615 100 ±1%
R617 6.65K ±1%
D612 MA8150M
Q610 2SC4412
R616 3.3K ±1%
C611 0.027
R614 43.2 ±1%
TCO
TILT
IC101 AN5768
R103 10 1W
C109 0.1
C103 0.1
R101 1K
R102 2.7 1/4W
C101 4.7 50V
C102 4.7 50V
+12V
C_SEL_3
H_PULSE
V_SAW
PARABOLA
C321 1000P
L302
Q355 UN5211
R324 19.6K ±1% 4.2Vp-p
D323 MA111
R312 21.5K ±1%
C315#
R313 6.8K ±1%
C309 1 50V
C308 0.022
R325 3.3K
D321 MA4051NM
R321 1K
D322 MA111
C311 33 25V
C312 0.01
C313 0.01
C314 75
R311 31.6K ±1%
1.8V0-p
R327 32.4K
R322#
C320#
2.9 V
1.8 V
C323 0.01
R323 4.02K ±1%
V_VCC
VHS
H_GND
H_PULSE IN
HDelay C
VPH
Ref
Ref fl
Tre Def.C
Retrace Def.C
V_GND
V_SAW
Vref
VOUT
VGV
VGH
HOUT
Retrace
Trace
H_VCC
IC301 M52723ASP
R301 20K ±1%
L301
R326 1K
C322 0.01
C306 0.01
C303 100P
C304 100P
C305 33 25V
C324#
R306#
R309 20K ±1%
R308 20.0K ±1%
R318# 100K
Q354# KTC945_GP
R315# 18K
C318# 2.2 50V
R302 20.5K ±1%
C301 0.01
C307 2.2 50V
R305 2.05K ±1%
R307 3.9K
R316# 10K
C319# 4.7 50V
C316 4.7 50V
R314 6.49K ±1%
R317# 2.7K
R319# 100K
4.9V0-p
2.1V
2.8V
10.0V0-p
4.9V
5.1V
9.3V0-p

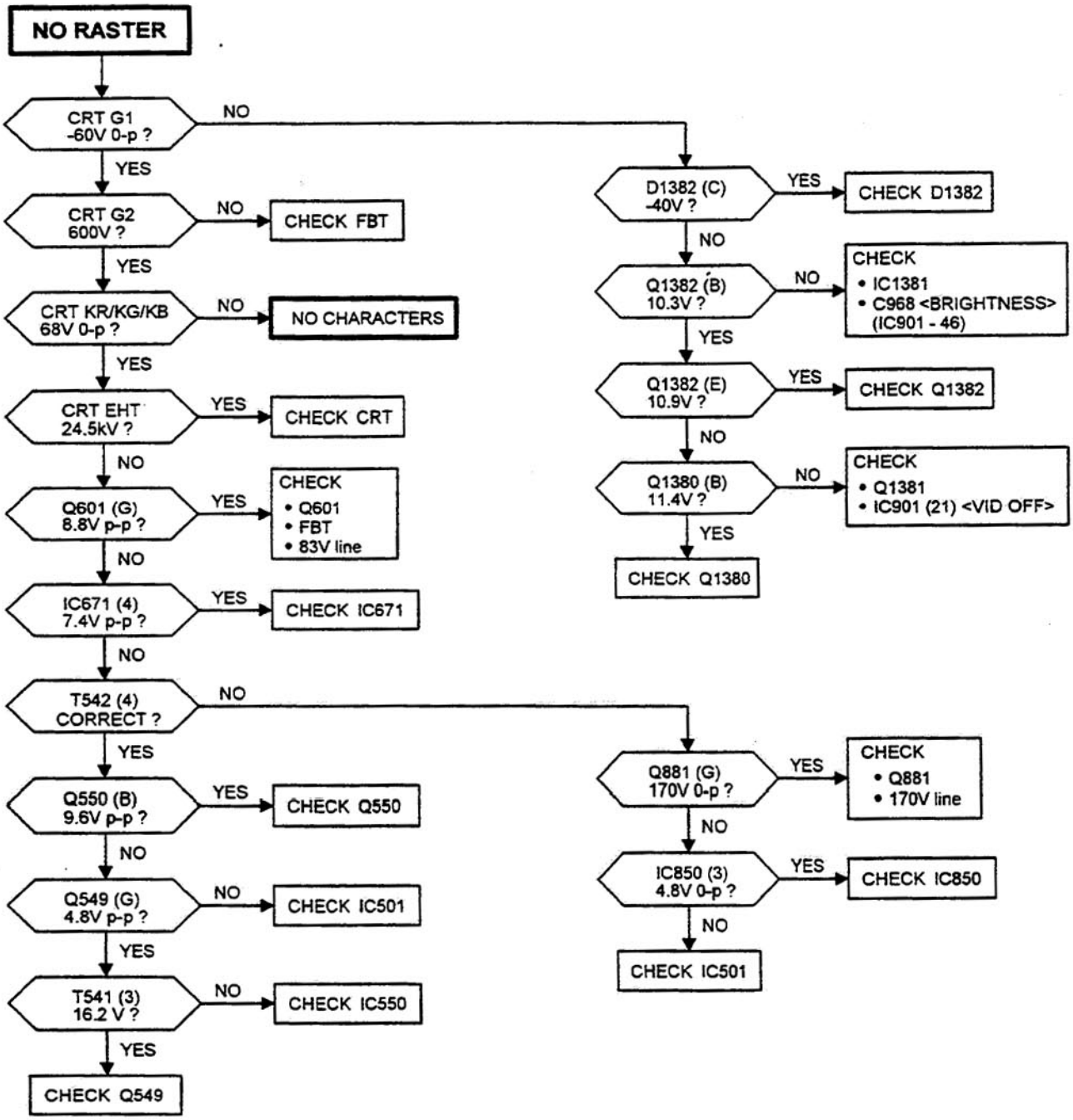

N103
TJS118590T
TILT COIL (W/DY)
R108#
IC462#
AN5767K
+12V
D448#
IC102#
AN5769
R104#
10
1/4W
C111#
C104#
0.1
R105#
10
1/4W
C110#
R420#
8.66K
±1%
R454#
10K
1/8W
(V_MOI_G)
V_CONV
R421#
845
±1%
R451#
2.2K
(H_MOI_G)
H_CONV
R452#
4.7K
R456#
6.8K
1/8W
VS
Q452#
UN5211A
R106#
39
1/2W
HS
C105#
R466#
2.2K
1/8W
H_MOI_OFF
TP5
C106#
R107#
68
1/4W
R458#
8.2K
R350
100
C107#
V_MOI_D
R459#
121K
±1%
C108#
H_MOI_D
R450#
20K
±1%
36.0V
28.0V
N102#
TJS118610T
TILT COIL
V_CONV
H_CONV
(H/V CONV. COIL)
1.2V
0.6V
35.0V
84.0V0-p
49.0V
C352
10
100V
R351
10K
3W
Q352
2SC3902ST
+350V
D351
MA111
R353
10
1/4W
C353
0.47
400V
T351
TLH9010
R371
390K
1/2W
TP4
DAF
D352
MA111
R354
10
1/4W
R372
2.2M
S371
TAGA004
C371
470P
500V
R356
100K
R355#
Q353
2SA1507ST
Q371
2SC4902
500.0Vp-p
Q351
HBF422
R374
6.98K
±1%
R373
100K
R352
634
±1%
C354#
TNPH0187
6.2V
3.1V
209.0V0-p
172.0V
37.0V

TROUBLE SHOOTING HINTS



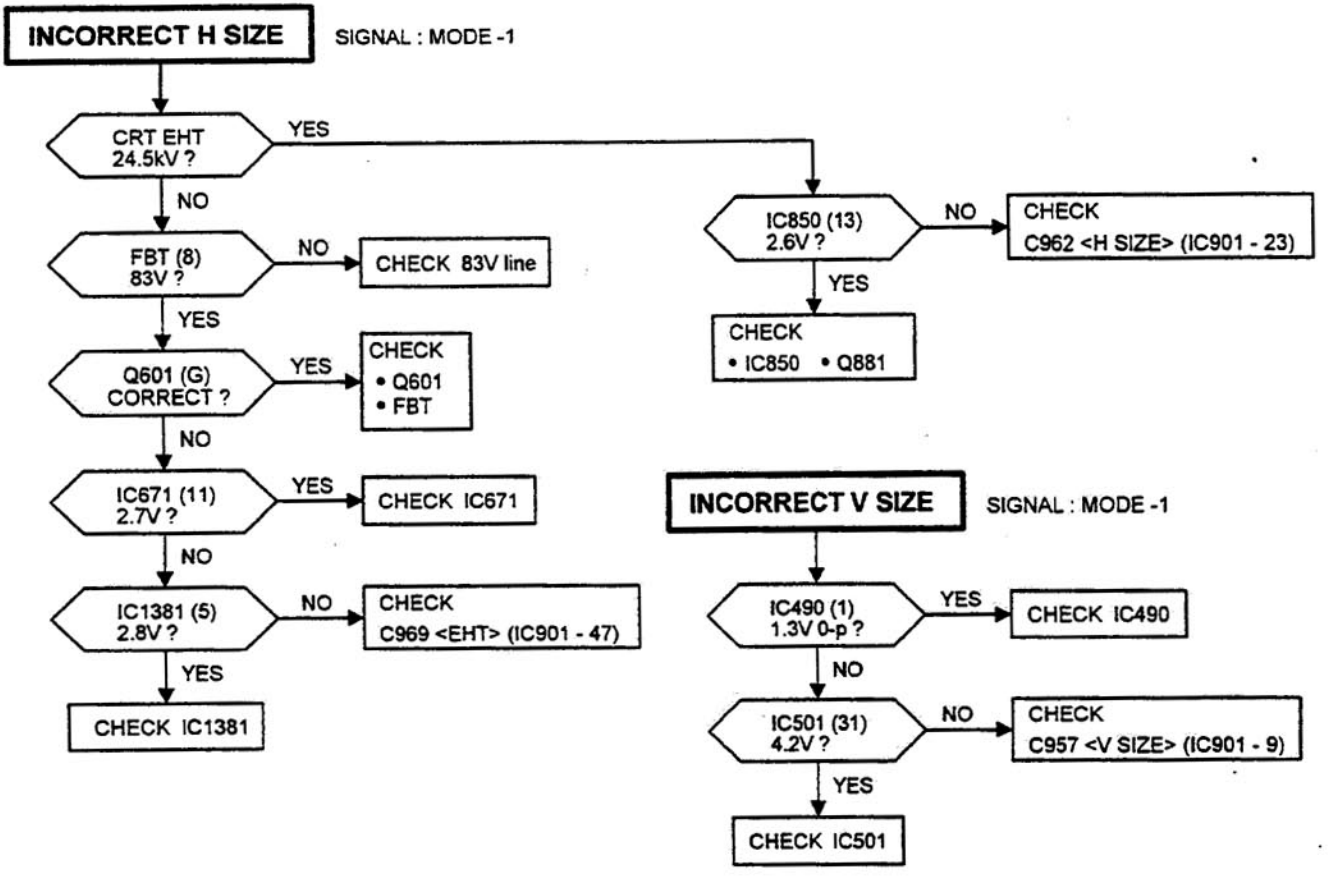
Voltage of T823 (3)

AC Input	IC841 (D)
100V	122V
120V	150V
220V	280V
240V	306V



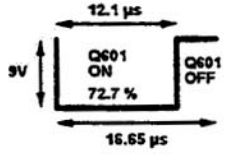
Voltage of T542 (4)

	f H	Value
MODE - 1	60.0 kHz	92.4V
MODE - 2	31.5 kHz	47.8V
MODE - 3	37.5 kHz	59.7V
MODE - 4	46.9 kHz	73.7V
MODE - 5	49.7 kHz	82.0V
MODE - 6	56.5 kHz	86.6V
MODE - 7	60.2 kHz	93.6V
MODE - 8	64.0 kHz	97.9V

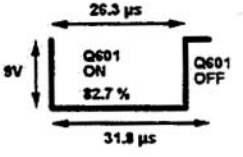


Q601 (G) Wave Form

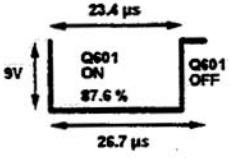
<MODE - 1 : 60 kHz>



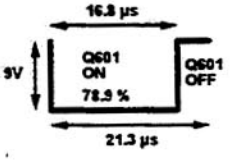
<MODE - 2 : 31.5 kHz>



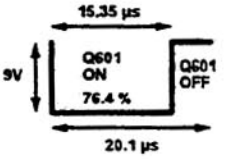
<MODE - 3 : 37.5 kHz>



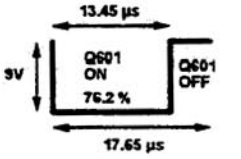
<MODE - 4 : 46.9 kHz>



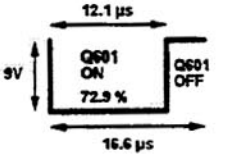
<MODE - 5 : 49.7 kHz>



<MODE - 6 : 56.5 kHz>



<MODE - 7 : 60.2 kHz>



<MODE - 8 : 64.0 kHz>